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UNITED STATES DISTRICT COURT DISTRICT OF NEW JERSEY

CONNIE BALOGH, GEORGE
BAUMAN, BRIDGET COLLINS,
JACK TOWNSEND GOOD,
MOUSSA KOUYATE, ROBERT
MASON, JERRY MORGAN,
SHARON RABADI, TAMARA
STUCK, TAHISHA STYRON,
MILICIENT SUTTERS, and DANE
WEBB, individually and on behalf of
all others similarly situated,

Plaintiffs,

v.

APPLE INC.,

Defendant.

Civil Action No.

COMPLAINT and DEMAND FOR JURY TRIAL

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COMPLAINT

- 1. Apple Inc. ("Apple" or "Defendant") touts its culture of "innovation" and portrays itself as a company devoted to giving consumers freedom and better choices.¹ But the reality is Apple intentionally sought, obtained, and is maintaining an unlawful monopoly over smartphones in the United States. Apple dominates the U.S. smartphone market not by competing on the merits of any actual Apple innovation and invention, but by thwarting competition and trapping consumers in a walled garden that Apple calls its "ecosystem."²
- 2. There is nothing nurturing about the Apple ecosystem, however. Just the opposite: Apple has deliberately abused its power over both iPhone users and third-party developers and innovators to stunt and kill off technologies and services that Apple views as threats to the dominant position of the iPhone in the United States—and to the billions in monopoly rents Apple is earning unlawfully, rather than on the merits.
- 3. Following their investigations of Apple, the U.S. Department of Justice ("DOJ") and fifteen States and the District of Columbia have sued in their sovereign

¹ See, e.g., Apple's iconic "1984" commercial introducing the Macintosh personal computer. Mac History, 1984 Apple's Macintosh Commercial (HD), YouTube (Feb. 1, 2012) https://www.youtube.com/watch?v=VtvjbmoDx-I.

² The term "walled garden" is a metaphor for an exclusive and tightly controlled technology environment, and refers specifically to a closed ecosystem or platform that restricts the flow of information and services to and from the technology provider and users.

capacities to stop Apple's unlawful monopolization.³ This Class Action is brought on behalf of the millions of consumers who, like Plaintiffs Connie Balogh ("Balogh"), George Bauman ("Bauman"), Bridget Collins ("Collins"), Jack Townsend Good ("Good"), Moussa Kouyate ("Kouyate"), Robert Mason ("Mason"), Jerry Morgan ("Morgan"), Sharon Rabadi ("Rabadi"), Tamara Stuck ("Stuck"), Milicient Sutters ("Sutters"), Tanisha Styron ("Styron"), and Dane Webb ("Webb") (collectively, "Plaintiffs") bought iPhones directly from Apple at an artificially and unlawfully inflated price and who were otherwise injured by Apple's relentless march toward and maintenance of its monopolistic domination of the U.S. smartphone market.

4. The tools Apple uses to build and maintain its monopoly have included (a) making it difficult and costly for consumers to switch to other smartphones, such as those using the Android operating system; (b) preventing developers from offering super apps,⁴ cloud-based software, and other technologies that would make consumers less dependent on the iPhone; and (c) forcing consumers and developers to use Apple-controlled systems (such as the Apple's App Store and its Digital Wallet).

³ United States v. Apple Inc., 2:24-cv-04055-MEF-LDW (D.N.J. Mar. 21, 2024).

⁴ A "super app" combines multiple core mobile features (*e.g.*, messaging, digital wallets) in a single app, while also giving access to independently developed "miniapps" so that, in part, users are able to have the same experience across devices.

- 5. Apple's strategy has worked, but only for Apple. By unlawfully monopolizing the market, Apple is keeping prices higher than they otherwise would be and denying consumers choices they otherwise would have—including a path for consumers to be able to choose *better* smartphones, apps, and services.
 - 6. Plaintiffs bring this action to end Apple's abuse.

I. INTRODUCTION

- 7. Although Apple was founded in 1976, it metamorphosed around 2001 from a company focused on desktop computers to one focused on portable devices—and the monetization of the content, software, and applications accessed through those devices. It launched the iPod in 2001, along with iTunes, which allowed users a wide selection of music for a fee-per-download. The iPod vastly increased Apple's revenues. While introduced in 2001, by 2006, Apple was selling over 39 million of the devices annually, plus the required iTunes music services.⁵
- 8. Apple learned from its iPod experience that it could be a seller of devices *and* derive additional fees by exercising control over the interface between users and the services, content, and products they desired to access inside Apple's walled garden.

Mitchell Clark, *The iPod made the iPhone possible*, The Verge (May 11, 2022), https://www.theverge.com/2022/5/11/23065643/apple-ipod-iphone-revitalization-mobile-devices (39 million devices sold annually by 2006).

- 9. In 2007, Apple launched its iPhone smartphone. Apple quickly decided that, instead of competing on the merits for consumers to choose the iPhone based on pricing and quality, it would work to "lock" consumers within its walled garden and, like a Venus Flytrap, make the "ecosystem" "sticky" to make it difficult (and costly) for consumers to switch to competing devices and platforms.
- 10. Apple used that strategy to unlawfully obtain and maintain a dominant share of the U.S. smartphone market—and to charge excessive prices and fees. As its market power grew, Apple abused that power to control app developers and other third parties, thwarting and undermining innovation and competition and extracting more cash in more ways from users and developers.
- 11. The strategy while anticompetitive has paid off enormously for Apple.
- 12. On the iPhones alone, Apple's margins are more than twice that of comparable sellers and Apple charges prices far above what it could in the absence of its anticompetitive behavior.
- 13. Apple also exacts fees of up to 30% of the price at which third parties—those who actually developed the offering—sell an app, plus additional cuts Apple takes from in-app sales.
- 14. Apple even charges to use its iPhone to pay for things *not* offered on the iPhone or in an app. When an iPhone owner uses their iPhone to tap and pay for

diapers at the drugstore or a hot dog at the ballpark using their stored credit card information, Apple is right there, taking a fee.

- 15. Apple also gets a cut of other uses of the iPhone, such as searching the internet. According to late 2023 testimony in recent DOJ litigation against Google, Google pays Apple a significant 36% portion of advertising revenue Google receives on account of searches done using Apple's Safari search engine on the iPhone. ⁶
- 16. Apple could not have achieved its market dominance without the value that developers and accessory makers bring to the table. But Apple also knows that innovation by those same people could create more attractive and/or cheaper alternatives to the iPhone for consumers—forcing Apple to truly compete.
- 17. Apple stands in a powerful position as the intermediary between developers/creators and iPhone users. In that position, for example, Apple can and does demand contractual restrictions in its agreements with developers, forces developers to go through Apple's "app review" process, and controls access to Application Programming Interfaces ("APIs"). To protect its monopolistic strategy and profits, Apple intentionally abuses its intermediary position to reduce

⁶ See Kylie Kirschner, Google's lawyer 'visibly cringed' when this confidential number was said aloud during its antitrust trial, report says, Yahoo! Finance (Nov. 14, 2023), https://finance.yahoo.com/news/googles-lawyer-visibly-cringed-confidential-155655064.html.

competition. For example, Apple selectively enforces its contractual restrictions, abuses its "app review" process, and denies developers access to APIs.

- 18. The result is that Apple is stifling potentially competing technologies that would make it easier (and more attractive and less costly) for consumers to switch from iPhones to other smartphones, including technologies that would allow consumers to have the same experience on any smartphone. Such technology would require iPhone to compete on the merits with other smartphones.
- 19. For example, Apple has chosen to suppress at least the following technologies, making the iPhone worse for consumers and thwarting competition to Apple's market power: (a) super apps, (b) cloud streamed gaming, (c) platformagnostic messaging apps that work seamlessly among different smartphone platforms, (d) platform-agnostic smart watches that equally well with different smartphone platforms, and (e) alternatives to Apple's digital wallet, including digital wallet apps that are platform-agnostic.
- 20. Because super apps combine allow users to get the same experience across devices, such technology increases competition among smartphones. By contrast, suppressing the development of super apps suppresses competition among smartphones and harms all smartphone users—including iPhone users—by denying them access to high quality experiences. It also harms developers by preventing

and/or disincentivizing them from developing and providing such super apps to users.

- 21. Cloud streaming game apps allow users to play digital games even on smartphones with less expensive hardware by locating the "high-compute" functions in the cloud. Decreasing the reliance on expensive smartphone hardware increases competition in the smartphone market. Suppressing cloud streaming games harms users by denying them the ability to play high-compute games without expensive smartphones. It also harms developers by preventing them from selling such games to users.
- 22. Messaging apps that work equally well across all smartphone platforms improve competition among smartphones because users can more easily switch phones without changing the way they communicate with friends, family, and others or losing certain functionality when they switch phones. Apple favors its own messaging app (Apple Messages) and makes other messaging apps on the iPhone worse generally and relative to Apple Messages by prohibiting third-party apps from sending or receiving carrier-based messages. Apple thereby knowingly and deliberately degrades the quality, privacy, and security of messaging for its users and for non-iPhone users. Apple's tactic also harms developers by artificially constraining the size of their user base below what it would be absent Apple's effort

to sustain its monopoly, thereby suppressing innovation and competition that would benefit consumers and developers.

For purposes of this Complaint, "smartwatch" refers to a watch (such 23. as the Apple Watch) that is paired with a smartphone and allows users, for example, to receive notifications, make calls, respond to messages, or make digital payments. A smartwatch that can be paired with different smartphones is beneficial to consumers because smartwatches are relatively expensive and a platform-agnostic smartwatch allows a user to retain their investment in a smartwatch when switching phones. Platform-agnostic smartwatches therefore make it easier and less costly for a user to switch from an iPhone to a competing smartphone. Apple smartwatches are particularly expensive, with prices ranging from \$249 to \$799. Apple Watches are deliberately made hard to use and have less functionality when paired with smartphones other than iPhones. And Apple similarly suppresses key functions of third-party smartwatches—including the ability to respond to notifications and messages and to maintain consistent connections with the iPhone. In taking these steps, Apple denies users access to greater choice of high performing smartwatches with preferred styling, better user interfaces and services, or better batteries. Apple also harms third-party smartwatch developers by decreasing their incentives and ability to innovate and sell products.

- 24. Contactless, "tap to pay" transactions boomed in the United States during and since the Covid-19 epidemic. As a result, digital wallets are a core feature in the U.S. smartphone market. Platform-agnostic digital wallets allow users to move from one smartphone platform to another without losing familiarity, functionality, and trust, thereby making the switch easier. Apple has stymied the development of platform-agnostic and third-party digital wallet alternatives to its own Apple Wallet. In doing so, Apple has denied users choice to access digital wallets that would have provided a wide variety of enhanced features and denied digital wallet developers—such as banks—the opportunity to provide advanced digital payments services to their own customers.
- 25. Apple's anticompetitive conduct comes at a great cost to consumers. Apple artificially inflates the price for buying and using iPhones. It suppresses or blocks the development of features like super apps, cloud-streaming games, and secure, platform-agnostic texting. It suppresses and disincentivizes the development of beneficial apps, like alternative digital wallets, because developers cannot sell those apps for use on iPhones—approximately 60% of the U.S. smartphone market.
- 26. As just one measure of where Apple's focus is, on information and belief, Apple's spending on stock buybacks and dividends outstrips its spending on research and development 2:1.

- 27. In the absence of Apple's anticompetitive march to monopoly power, there would be more innovation, better products and experiences for consumers, and lower prices.
- 28. Importantly, Apple too has less incentive to innovate because it has insulated itself from competition and settled instead for what Apple deems "good enough" for consumers.
- 29. The antitrust laws do not allow a monopolist to dictate what is "good enough" for U.S. consumers. Apple, like all firms, must compete on the merits—and leave the choice to consumers. This lawsuit is brought to ensure Apple plays by the rules and earns consumers' dollars and trust fair and square.

II. THE PARTIES

A. Plaintiffs

1. Arizona Plaintiff

30. Plaintiff Jerry Morgan is a resident of Arizona who purchased an iPhone 12 Mini directly from Apple in Arizona in or around August 2021.

2. <u>California Plaintiffs</u>

31. Plaintiff Robert Mason is a resident of California who purchased an iPhone 12 Pro directly from Apple in California in or around October 2020.

3. Connecticut Plaintiffs

32. Plaintiff Sharon Rabadi is a resident of New York who purchased an iPhone 11 Pro Max directly from Apple in Connecticut in October 2020.

33. Plaintiff Jack Townsend Good is a resident of Connecticut who purchased an iPhone 15 Pro Max directly from Apple in Connecticut on September 22, 2023.

4. Maine Plaintiff

34. Plaintiff Connie Balogh is a resident of Maine who purchased an iPhone14 directly from Apple in Maine in August 2022.

5. Michigan Plaintiff

35. Plaintiff Bridget Collins is a resident of Michigan who purchased an iPhone 11 directly from Apple in Michigan in July 2020.

6. Nevada Plaintiff

36. Plaintiff Dane Webb is a resident of Nevada who purchased an iPhone14 Pro directly from Apple in Nevada in September 2022.

7. New Jersey Plaintiff

37. Plaintiff George Bauman is a resident of New Jersey who purchased an iPhone directly from Apple in March 2023.

8. New York Plaintiffs

- 38. Plaintiff Moussa Kouyate is a resident of New York who purchased an iPhone 13 directly from Apple in New York on March 7, 2022.
- 39. Tahisha Styron is a resident of New York who purchased two iPhones13 Pro Max directly from Apple in New York in September 2021.

9. Oregon Plaintiff

40. Plaintiff Tamara Stuck is a resident of Oregon who purchased an iPhone 13 directly from Apple in Oregon on April 4, 2022. After it was damaged, she subsequently replaced her phone in Oregon through the AppleCare Program.

10. Wisconsin Plaintiff

41. Plaintiff Milicient Sutters is a resident of Wisconsin who purchased an iPhone 14 directly from Apple in Wisconsin on December 1, 2022.

B. Defendant

- 42. Defendant Apple, Inc. is a global technology company and California corporation with its principal place of business in Cupertino, California.
- 43. Apple's market capitalization of more than \$2.5 trillion makes it one of the most valuable public companies in the world. Its net income for the twelve months ending December 31, 2023 was \$100.9 billion—more than nine times that of Samsung, its largest competitor in the U.S. smartphone market.
- 44. Apple's iPhone drives Apple's growth and profits. On information and believe, Apple takes in profits of 30% or more on iPhones, a rate that is significantly higher than that earned by its competitors in the smartphone market. And, as set forth above, Apple also reaps substantial profits from the actual use of the device, whether from the fees it extracts from the purchases of apps or from in-app purchases or the fees it charges for digital subscription services like Apple Music. Increasingly,

Apple also generates substantial revenues from sales of items in its "Wearables, Home, and Accessories" category, including Apple's smartwatch, the Apple Watch.

- 45. Apple also dominates the smartphone market in which it operates. On information and belief, Apple itself recognizes that the iPhone is part of the performance smartphone market, which is a segment of the broader smartphone market. Apple's share of the U.S. performance smartphone market (by revenue) is approximately 70%, while its share of the overall U.S. smartphone market is more than 65%.
- 46. Apple's shares of the performance and overall smartphone market have remained notably steady over the last decade.
- 47. Apple's closest U.S. competitor, Samsung, has U.S. market share nearly one-third of Apple's share.
- 48. Importantly, Apple also is on a path to further grow its dominance of the U.S. smartphone market through key demographics, especially younger U.S. consumers. The average age of iPhone users in the United States is decidedly lower than that of other smartphones, like Samsung. About one third of U.S. iPhone users are under the age of 30 and the vast majority of U.S. teenagers reportedly expect to purchase an iPhone for their next smartphone. By locking in key user groups through its monopolistic practices, Apple is able to extract monopoly rents on iPhones, services, apps, and accessories, generating higher margins per user compared to its

smartphone competitors, and also exercise even greater control over developers and others in the smartphone ecosystem who need access to those key user groups—all of which allows Apple to entrench its dominance.

III. JURISDICTION AND VENUE

- 49. Plaintiffs bring this action pursuant to Sections 4 and 16 of the Clayton Antitrust Act of 1914 ("Clayton Act"), 15 U.S.C §§15 and 26, for violations of Section 2 of the Sherman Antitrust Act of 1890 ("Sherman Act"), 15 U.S.C. §2, and pursuant [list state statutes].
- 50. This Court has subject matter jurisdiction over this federal antitrust case pursuant to 28 U.S.C. §§1331 and 1337(a), as well as pursuant to 28 U.S.C. §§1332(a)(2) and (d)(2)(A) because at least one member of the proposed Class(es) is a citizen of a State different from Apple, the proposed Class(es) will comprise more than 100 members, and the amount in controversy, exclusive of interest and costs, exceeds the sum or value of \$5,000,000.
- 51. This Court also has supplemental jurisdiction over Plaintiffs' State law claims pursuant to 28 U.S.C. §1367(a).
- 52. The Court has personal jurisdiction over Apple, and venue is proper in this District under Section 12 of the Clayton Act, 15 U.S.C. §22, and under 28 U.S.C. §1391, because Apple transacts business and is found within this District.

- 53. Apple engages in, and its activities substantially affect, interstate trade and commerce. Apple is a corporation headquartered in Cupertino, California that sells and distributes, among other things, iPhones and iPhone-compatible services, apps, accessories, and other devices nationwide across state lines and internationally, including in this District and in each state in which Plaintiffs and the members of the Classes reside.
- 54. Apple's unlawful actions, set forth in this Complaint, have harmed, and continue to harm, Plaintiffs and the Classes.

IV. SMARTPHONES AND THE RELEVANT MARKETS

A. The Smartphone Industry

55. Mobile phones are portable devices that enable communications over radio frequencies instead of telephone landlines. These signals are transmitted by equipment that covers distinct geographic areas, called "cells." While the first commercial cell phones became available in the 1980s, subsequent improvements in both cell phone components and wireless technology made it possible to transfer large volumes of data around the globe quickly. As a result, mobile phones began to offer a wider array of features, and consumers' adoption and use of mobile phones dramatically increased. Today, nearly all U.S. adults own a mobile phone; according to some statistics, the number is about 97%.

⁷ Alexus Bazen & Kirsten Schmitt, Cell phone statistics 2024, Consumer Affairs

- 56. Smartphones combine the functionality of a traditional mobile phone with advanced hardware and software components. Smartphones not only make phone calls but allow users to surf the internet, listen to music, send text messages, take pictures, play games, access software for work, manage their finances, and more.
- 57. Consumers choose between smartphones based, in part, on their functionality. Today, smartphone functionality is driven in large part, though not exclusively, by a combination of hardware and software components. In a competitive market, smartphone manufacturers would compete and innovate to provide the best functionality.
- 58. Although consumers could replace some smartphone functionality with a combination of other devices, such as separate cameras and laptop computers, they generally prefer to access this combination of functionality as part of a single device. Thus, phones with some but not all of these features are not reasonable substitutes for smartphones. For example, a Canon or Nikon camera is not a substitute for an Apple or Samsung smartphone, notwithstanding that both of these products are capable of taking digital pictures. Similarly, a laptop computer with an internet connection can access the internet, but it is also not a substitute for a smartphone.

Journal of Consumer Research (Dec. 12, 2023), https://www.consumeraffairs.com/cell_phones/cell-phone-statistics.html.

- 59. Smartphones can be purchased directly from manufacturers, like Apple, Google, or Samsung. They can also be purchased or leased through third-party cellular service carriers, such as Verizon or AT&T. Finally, they can be purchased from third-party retailers (*e.g.*, Wal-Mart and Best Buy).
- 60. In the United States, 20% or more of all iPhone purchases are direct purchases through Apple, either in its retail spaces or online. Approximately 60%-75% of U.S. iPhone purchases are completed through a third-party cellular service carrier, with the remainder purchased through third-party retailers.

B. Smartphone Hardware.

- 61. A smartphone's hardware includes the frame and screen. Higher performing smartphones are typically constructed from better materials like tempered glass and metal instead of plastic, manufactured to higher standards that make them more durable (*e.g.*, water- and dust-proof), and they have higher-quality displays.
- 62. A smartphone's hardware also includes the semiconductor chipsets that run the smartphone: central processing of software instructions, graphics, video, display, memory, data storage, and connection to wireless networks. Chipsets that offer superior performance—faster processing and network connections, better graphics, and more storage—are costly. As a result, smartphone manufacturers typically include them only in more expensive performance smartphones.

- 63. Smartphone hardware includes other important components like cameras and position and motion sensors. Performance smartphones typically have higher quality cameras, better battery life, wireless charging, and advanced biometrics such as face or fingerprint scanning.
- 64. Smartphones also contain several types of antennas that allow the phone to communicate with other smartphones, accessories, or other devices using standard communication protocols such as Wi-Fi, Bluetooth, and Near-Field Communications ("NFC").
- 65. Wi-Fi is a wireless networking technology that uses radio waves to provide wireless high-speed Internet access through mobile devices, computers, printers, and other equipment. "Wi-Fi," in particular, refers to IEEE 802.11 standards that define the protocols that enable communications with current Wi-Fi-enabled wireless devices such as wireless routers and access points.
- 66. Bluetooth is a wireless standard that allows smartphones to use shortwave radios to communicate with accessories like headphones and smartwatches. An industry-wide Bluetooth standard specifies technological requirements to ensure that all Bluetooth devices can recognize and interact with each other. A typical Bluetooth signal has a range of about 30 feet.
- 67. NFC allows smartphones to interact with NFC-enabled devices like a credit card terminal at a coffee shop. NFC relies on short-range wireless

technologies, including radio signals, to communicate and share information. To operate, two NFC-enabled devices must typically be within four centimeters or less of one another.

- 68. Three device manufacturers, Apple, Samsung, and Google, account for approximately 94% of all smartphones by revenue in the United States. Apple and Samsung alone account for approximately 90% of all smartphone revenues in the United States.
- 69. Cloud-based technologies are run using hardware and software in remote computing centers ("the cloud") rather than by hardware and software on a smartphone. The user experiences the technology on the phone, but the complex computing that generates the rich experience and that executes the user's commands happens in the cloud. Thus, cloud-based applications can deliver rich experiences on smartphones that have less capable hardware than iPhones currently contain.

C. Smartphone Operating Systems, Applications, and Other Software.

- 70. In addition to hardware, smartphones include various software components that make a smartphone more attractive to users.
- 71. A smartphone's operating system is its most important software component. The operating system is the foundational software that manages both the hardware and other software programs on the device. All iPhones are preloaded with Apple's proprietary and exclusive iPhone operating system called iOS. The

only other significant mobile operating system in the United States is Google's Android, which works with smartphones manufactured by Samsung, Google, Motorola, and smaller manufacturers.

- 72. Software applications, known as "apps," are programs that perform specific tasks at the smartphone user's request, such as sending messages, playing music, or browsing the web. Apps depend on a smartphone's operating system to function. For example, to make a video call, apps must communicate with a smartphone's operating system to access various hardware components on the phone, including the camera, the microphone, and the speaker. Apps communicate with a smartphone's operating system through application programming interfaces ("APIs").
- 73. Apps that work with a particular smartphone operating system are called native apps. Apple's native iOS apps work with iPhones, and native Android apps work with Android smartphones.
- 74. Most app developers do not view Android as a substitute for iOS or iOS as a substitute for Android. The overwhelming majority of users choose a single phone and do not carry an Android phone and an iPhone at the same time ("multi-homing"). Therefore, a developer cannot reach iPhone users on Android or Android users on iPhones. Due to the lack of user multi-homing, most developers create native apps for both iOS and Android to reach the greatest number of smartphone

users. For example, a food delivery or ride-sharing app cannot develop an app just for Android phones or just for the iPhone. Developing for both platforms is often necessary for developers to reach the scale they need to be viable.

- 75. It is also important to develop apps for the iPhone and other smartphone platforms because most apps are increasingly "social" in nature and require users on one platform to reach users on the other. For example, the developer of a dating app must enable its users on iPhones to meet users on Android and vice-versa. A moneysharing app (e.g., PayPal or Venmo) must enable users on Android devices to send money to users on iPhones and vice versa.
- 76. App developers typically provide a similar user experience for native apps on iPhones and Android smartphones to minimize the resources and risks of maintaining different features across different smartphones. Even so, developers must program native apps to work with a specific operating system, and so, they do not always interoperate or synchronize across different operating systems.
- 77. Middleware is software that provides similar APIs and functionality across a diverse set of operating systems and devices. This allows developers to create cross-platform applications, without having to write separate code for individual operating systems (iOS or Android) or devices, because developers can rely on the APIs exposed by the middleware rather than APIs that only work on specific operating systems or devices.

- 78. Apple has long understood how middleware can help promote competition and its myriad benefits, including increased innovation and output, by increasing scale and interoperability. As Avadis Tevanian, Apple's then-Senior Vice President of Software Engineering testified during the government's landmark monopolization case in *United States v. Microsoft*, No. 98-1232 (TPJ) (D.D.C. Oct. 12, 1998): "Because we have created QuickTime for both Windows and Macintosh computers, developers can create a single version of a content product that will run on both Macintosh and Windows, without the additional expense of 'porting' the product to different operating systems."
- 79. In the context of smartphones, examples of middleware include internet browsers, internet- or cloud-based apps, super apps, and smartwatches, among other products and services. While not meeting the technical definition of middleware, certain other products and services may nonetheless have the same economic impact as middleware, such as eliminating the added expense of porting a product or experience across hardware or operating systems. For the purposes of this complaint, middleware refers to both technical middleware and to products and services that, while not technically middleware, have the same economic effect.

⁸ Direct Testimony Of Avadis Tevanian, Jr.: U.S. V. Microsoft Corporation; State Of New York V. Microsoft Corporation, Antitrust Division, U.S. Dep't of Justice, https://www.justice.gov/atr/direct-testimony-avadis-tevanian-jr-us-v-microsoft-corporation-state-new-york-v-microsoft.

D. Smartphones as Platforms

- 80. Smartphones are platforms because they bring together different groups that benefit from each other's participation on the platform. While smartphones such as the iPhone generally include one or more simultaneous transaction platforms, smartphones themselves are used and valued by consumers for a variety of reasons separate from their ability to facilitate a simultaneous transaction. Indeed, consumers care about non-transactional components of the phone, such as its camera and processing speed, and they care about non-transactional components of apps, such as their features and functionality.
- 81. The economics of a smartphone platform are such that the platform's value increases when new apps and new features are added to the platform. In order to create this value for the iPhone, Apple has opened its smartphone platform to third-party developers, whose countless inventions and innovations have created enormous value. Apple has opened the platform to third-party developers to capture this value even though there is no extensive regulatory framework requiring it to do so or overseeing how it interacts with those third parties. In this way, smartphone platforms are different from other platforms, like landline telephone networks, whose value-adding features were built primarily by the platform operator and which were only opened to third parties when the platform operator was required to do so by regulation. When a third-party developer for the iPhone creates a valuable new

feature, consumers benefit and consumer demand goes up for Apple's products, increasing the economic value of the iPhone to Apple. This has played out hundreds of thousands of times for the iPhone, resulting in an enormously valuable smartphone platform reflecting the combined contributions of millions of developers.

82. In contrast, by limiting the features and functionality created by third-party developers—and therefore available to iPhone users—Apple makes the iPhone worse for consumers and deprives itself of the economic value it would gain as the platform operator. It makes no economic sense for Apple to sacrifice the profits it would earn from new features and functionality unless it has some other compensating reason to do so, such as protecting its monopoly position and profits.

E. Relevant Markets

- 83. Apple has monopoly power in the market for performance smartphones.
- 84. The market for performance smartphones is the appropriate market because market participants, including Apple, do not consider entry-level smartphones to be competitors of performance smartphones. All smartphones compete against each other in a broad relevant market. But industry participants, including Apple, assess competition among smartphones in narrower markets that are best understood as submarkets of the larger all-smartphone market. Because

Apple chooses not to compete to sell new smartphones in the entry-level tier, the most relevant market to assess its conduct is a narrower market that excludes this entry-level tier. Regardless of how the market is drawn, however, Apple's conduct is unlawful. Performance smartphones are a relevant product market.

- 85. Performance smartphones are a narrower relevant product market within the broader smartphone market. This narrower market includes those smartphones that compete with most iPhones, and it excludes the lowest-end or entry-level smartphones.
- 86. Industry participants recognize performance smartphones as distinct, and they frequently group smartphones into tiers that separate out entry-level smartphones from performance smartphones.
- 87. Apple has also long recognized a distinction between the higher-end smartphones and lower-end, entry-level smartphones. According to the DOJ's Complaint, Apple's own documents indicate that it does not view entry-level smartphones as competing with the iPhone and other performance smartphones.
- 88. Performance smartphones have distinct characteristics and uses as compared to other smartphones. For example, entry-level smartphones are generally made with lower-quality materials (*e.g.*, plastic instead of metal and glass) and are less durable. They have lower-performance components, such as slower processors, as well as lower-capacity storage, which prevent users from running more intensive

applications or storing large volumes of pictures and data on the device. Entry-level smartphones also often lack features like an NFC antenna that allows consumers to use their phone to make payments or access passes for public transit.

- 89. Because of these many differences, among others, between entry-level smartphones and performance smartphones, entry-level smartphones are not reasonable substitutes for performance smartphones.
- 90. Moreover, competition from non-performance smartphones is not sufficient today to prevent Apple from exercising monopoly power in the performance smartphone market.
 - 91. Smartphones are a broader relevant product market.
 - 92. Smartphones are a relevant product market.
- 93. Smartphones are distinct from phones that offer less capable hardware and software options. These other phones, sometimes called "feature phones," may offer basic web browsing in addition to calling and messaging options, but they do not offer the breadth of access to the internet or third-party apps as do smartphones. Similarly, these phones often have lower-quality hardware, such as poorer displays, less capable cameras, and less sophisticated microphones and speakers, and they can rely on physical keyboards instead of smartphone touch screens. Thus, these phones are not reasonable substitutes for smartphones.

- 94. Smartphones are also distinct from other portable devices, such as tablets, smartwatches, and laptop computers. These other devices lack the combination of function, size, and portability that consumers rely on in a smartphone, even if they offer some similar capabilities. Thus, none of these other products are reasonable substitutes for smartphones.
- 95. Apple, other participants in the market, and the public recognize that smartphones are distinct from feature phones and other portable devices.
- 96. Competition from feature phones, or other alternatives, is not sufficient to prevent Apple from exercising monopoly power in the smartphone market.
- 97. The United States is a relevant geographic market for performance smartphones and smartphones.
- 98. The United States is a relevant geographic market for the sale of performance smartphones and smartphones.
- 99. Users in the United States demand services offered by U.S. telecommunications companies when they purchase a smartphone. While Apple sells smartphones worldwide, its users are still geographically limited. Most consumers in the market for performance smartphones use their phones in the United States, and consumers who purchase a smartphone require a service plan with a U.S. telecommunications company in order to connect the phone to cellular and mobile networks.

- 100. Also, potential new smartphone entrants to the U.S. market must comply with telecommunications regulations and must satisfy other legal requirements. No extensive regulatory framework governs how Apple operates its platform with respect to developers, but there are a number of regulatory requirements that must be met in order to enter the smartphone market. Some international smartphone makers are effectively barred from offering their smartphones to U.S. consumers.
- 101. Consumers in the United States could not avoid or defeat an increase in the price of performance smartphones or smartphones by purchasing and importing smartphones from outside the United States. This allows Apple to set prices for the same smartphone in the United States separately from those in other countries. For example, Apple lowered the price of the iPhone 11 in China relative to the United States because Apple faced greater competition in China. This additional competition arose in part because a popular super app put competitive pressure on Apple and made it easier for users to switch from an iPhone to a rival smartphone. As a result, Apple is unable to command the same prices for the iPhone in China than it does in the United States, where there is less competition.
- 102. Apple has monopoly power in the smartphone and performance smartphone markets.

- 103. Apple has monopoly power in the smartphone and performance smartphone markets because it has the power to control prices or exclude competition in each of those markets. Apple also enjoys substantial and durable market shares in these markets.
- 104. Moreover, Apple's market shares likely underestimate Apple's power because they are protected by significant barriers to entry, network effects, and switching costs. Apple recognizes and exploits these barriers to entry, network effects, and switching costs to protect itself from competition from rival platforms and innovations, products, and services that may diminish consumer reliance on the iPhone.
 - 105. Apple's power will likely further increase over time.
- 106. In the U.S. market for performance smartphones, Apple estimates its market share exceeds 70%. These estimates likely understate Apple's market share today. For example, Apple's share among key demographics, including younger users and higher-income households, is even larger.
- 107. Even in the broadest market consisting of all smartphones including many smartphones that Apple and industry participants do not view as competing with Apple's iPhones and other higher-end phones Apple's share is more than 65% by revenue.

- 108. Similarly, even if consumers choose one phone over another, the vast majority of developers consider iPhones and Android devices as complements because developers must build apps that run on both platforms due to the lack of user multi-homing. In effect, the lack of multi-homing among users necessitates multi-homing among developers. This market reality increases the power that Apple is able to exercise over developers that seek to reach users on smartphones especially performance smartphones that run sophisticated apps.
- 109. Apple's power over developers, in turn, further locks in iPhone purchasers to Apple's walled-garden ecosystem by limiting users' ability to transfer their apps and data to non-Apple devices, making it difficult for users to switch away from Apple devices to avoid monopolistic overcharges.
- 110. And, as existing iPhone users get increasingly locked in, new smartphone buyers find other smartphones less and less viable as substitutes for iPhones because purchasing an iPhone allows them to interact more seamlessly with their friends and family who already have iPhones.
- 111. This snowballing effect means, for example, that nearly 90% of teenagers expect their first smartphone purchases to be iPhones, thus ensuring that the next generation of users will similarly become locked into Apple's ecosystem.

- 112. Any theoretical cross-elasticity of demand between iPhones and other smartphones does not suffice to stop Apple from imposing monopolistic prices on iPhone purchasers.
- 113. Apple's high market shares are durable. Over the last decade, Apple increased its share of smartphones sold in the United States most years. Through the same period, Apple collected more than half the revenue for all smartphones sold in the United States.
- 114. Apple's monopoly power in the relevant markets is protected by substantial barriers to entry and expansion. For example, since fewer than ten percent of smartphone purchasers in the United States are buying their first ever smartphone, there are fewer new customers available for Apple's rivals. Instead, rivals must encourage existing iPhone users to switch from using an iPhone to using another smartphone when they replace or upgrade their phone. As a result, switching costs – many created or exacerbated by Apple – impose substantial barriers to entry and expansion for rival smartphones. This barrier is increasingly impenetrable. Nearly 90% of iPhone owners in the United States replace their iPhone with another iPhone. At least one U.S. carrier estimates that as high as 98% of iPhone users on its network replace or upgrade their iPhone in a given quarter by buying another The increased switching costs that consumers experience because of iPhone. Apple's conduct underpins these exceedingly high retention rates.

- 115. Apple's monopoly power in the relevant markets is protected by other barriers to entry, expansion, or repositioning, as well. For example, introducing a new smartphone requires considerable investments in acquiring expensive and scarce components such as mobile chips and specialized glass for screens. Other significant barriers to entry include product design, software development, regulatory approval, manufacturing, marketing, and customer service. Because smartphones are bought through mobile carriers including Verizon, which has its operations headquarters in this district, new entrants or those seeking to expand or reposition must meet the carriers' technical requirements to access the major carrier networks in the United States. New entrants and smaller rivals must also negotiate distribution agreements and work to persuade carriers and other retailers to promote their products to consumers. As explained above, rival smartphones must also overcome the substantial network effects generated by interactions between users, developers, and others who interact with the iPhone.
- 116. Apple's iPhone platform is protected by several additional barriers to entry and expansion, including strong network and scale effects and high switching costs and frictions. For example, if an iPhone user wants to buy an Android smartphone, they are likely to face significant financial, technological, and behavioral obstacles to switching. The user may need to re-learn how to operate their smartphone using a new interface, to transfer large amounts of data (like their

contacts), to purchase new apps, or to transfer or buy new subscriptions and accessories. These switching costs and frictions are even higher when software applications, APIs, and other functionality do not help the different devices and operating systems to communicate and interoperate. These switching costs and frictions increase the "stickiness" of the iPhone, making users more beholden to the smartphone manufacturer and platform operator.

- 117. Many prominent, well-financed companies have tried and failed to successfully enter the relevant markets after running into of these barriers. Past failures include: Amazon (which released its Fire mobile phone in 2014 but could not profitably sustain its business and exited the following year); Microsoft (which discontinued its mobile business in 2017); HTC (which exited the market by selling its smartphone business to Google in September 2017); and LG (which exited the smartphone market in 2021). Today, only Samsung and Google remain as meaningful competitors in the U.S. performance smartphone market. Barriers are so high that Google is a distant third to Apple and Samsung, despite the fact that Google controls development of the Android operating system.
- 118. Apple's monopoly power is separately demonstrated by direct indicia. For example, Apple can and does profitably forego innovation without fear of losing customers to competitors. Indeed, Apple's vice president of iPhone marketing explained in February 2020, "In looking at it with hindsight, I think going forward

we need to set a stake in the ground for what features we think are 'good enough' for the consumer. I would argue were [sic] already doing *more* than what would have been good enough." After identifying old features that "would have been good enough today if we hadn't introduced [updated features] already," she explained, "anything new and especially expensive needs to be rigorously challenged before it's allowed into the consumer phone."

- 119. Apple's profits and profit margins, for nearly every aspect of the iPhone, are further evidence of Apple's monopoly power. For example, Apple's per-unit smartphone profit margins are far more than its next most profitable rival. Apple charges carriers more than its rivals to buy and resell its smartphones to the public, and it uses contract clauses that may impede the ability of carriers to promote rival smartphones, a harmful exercise of monopoly power that is hidden to most consumers. Apple extracts exorbitant fees from developers as much as 30% when users purchase apps or make in-app payments ("IAP"). Apple increasingly charges developers additional fees to promote their apps in the App Store, as well. In fact, this is one of the fastest-growing parts of Apple's services business, with revenue "increasing by more than a third to \$4.4B in FY 2022."
- 120. Apple also extracts a 0.15% commission from banks on credit card transactions through its digital wallet, while none of its smartphone competitors with digital wallets charge any fee. Apple predicts that it will collect nearly \$1 billion in

worldwide revenue on Apple Pay fees alone by 2025, and a recent report by the U.S. Consumer Financial Protection Bureau suggests these revenues will only increase, as "analysts expect the value of digital wallet tap-to-pay transactions will grow by over 150% by 2028."

121. These indicia of Apple's monopoly power are direct evidence of its monopoly power in the relevant markets.

V. FACTUAL ALLEGATIONS

A. Apple Launches the iPhone.

- 122. Apple launched the iPhone in January 2007—and immediately began linking it to the rest of the Apple business, telling users they could "sync[] content from a user's iTunes library on their PC or Mac" to their iPhone.
- 123. The original iPhone cost approximately \$299—approximately \$450 in 2024 dollars adjusted for inflation—with a two-year contract with a phone carrier.
- 124. Initially, nearly all apps for the iPhone were created by Apple, including Calendar, Camera, Clock, Contacts, iPod, Messages, Notes, Phone, Photos, Safari, Stocks, Voice Memos, and Weather.
- 125. By 2008, Apple began allowing third-party developers to create apps for the iPhone using a software development kit Apple provided that gave developers the digital tools for building native apps on Apple's iOS operating system.

Developers could earn money by selling apps and (later) in-app purchases and subscriptions.

B. Apple Profits from Third-Party Developers, But Views Them as a Threat to the iPhone's Dominance

- 126. The apps created by third parties for use on the iPhone were valuable to consumers and to Apple. Indeed, Apple's marketing for the iPhone highlighted to potential iPhone buyers "There's an app for that."
- 127. The proliferation of third-party apps for use on the iPhone has generated billions of dollars in profits for Apple and helped grow the iPhone user base to more than 250 million devices in the United States.
- 128. However, Apple also views third-party products and services as a potential threat to the dominant position of the iPhone in the U.S. smartphone market. On information and belief, Apple executives view third-party developers as "fundamentally disruptive" to Apple's smartphone monopoly because they can create apps and technologies that would decrease users' dependence on Apple and the iPhone and, thus, force Apple to compete on the merits.
- 129. Leveraging its dominant position and valuable user base, Apple methodically controls third-party developers, sacrificing the short-term benefits it would gain from improved products and services when Apple deems such sacrifices necessary to protect and sustain its monopoly.

C. Apple Tightly Controls App Creation and Distribution.

- 130. Apple tightly controls how developers distribute and create apps for iPhone users.
- 131. For example, in the United States, developers can only distribute—and users can only download—native iOS iPhone apps through Apple's App Store. Forcing all native iPhone apps to be sold in the United States only through the App Store allows Apple to use its monopoly power to impose contractual restrictions and rules on developers of native iPhone apps that limit *non-Apple* apps and services.
- App Store through its App Store Review Guidelines. Under these guidelines, Apple has sole discretion to review and approve all apps and app updates. On information and belief, Apple selectively and arbitrarily exercises that discretion to its own benefit, allowing Apple executives to control app reviews and decide whether to approve individual apps or updates—and to use App Store rules and restrictions to penalize and restrict developers that want to offer or use technologies that threaten the dominance of the iPhone and, in turn, Apple's monopoly power.
- 133. Apple also controls app creation by deciding which APIs to make available to developers for creating third-party apps. For example, on information and belief, developers cannot offer native iPhone apps unless they sign on to Apple's Developer Program License Agreement (DPLA), the terms of which are non-

negotiable (another exercise of Apple's dominance). The DPLA requires developers to use public APIs only "in the manner prescribed by Apple." It also prohibits third-party apps from using APIs that Apple designates as "private."

- 134. On information and belief, Apple selectively designates APIs as public or private to benefit itself. For example, Apple limits the functionality third-party developers can offer to iPhone users even when Apple permits the same functionality in its own apps or those of select third-parties. Again, Apple abuses its market dominance to use its DPLA to impose restrictions that penalize and restrict developers that take seek to advantage of technologies that threaten the dominance of the iPhone and Apple's monopoly power.
- 135. Apple is able to abuse its control over its App Store rules and DPLA because it knows developers have no viable alternative to offering apps to Apple's huge and valuable universe of U.S. iPhone users.
- 136. For example, web apps—apps created using standard programming languages for web-based content and available over the internet—are not a viable alternative to native iPhone apps. Many iPhone users do not look for or know how to find web apps, causing web apps to constitute only a small fraction of app usage. On information and belief, one Apple executive acknowledged that "[d]evelopers can't make much money on the web." Moreover, Apple can still control the functionality of web apps because Apple requires all web browsers on the iPhone to

use WebKit, Apple's browser engine—the key software components that third-party browsers use to display web content.

- 137. Nor can developers rely on alternative app stores in the United States, even though this would benefit developers and users. For example, developers cannot offer iPhone users an app store that only offers apps curated for use by children, even though consumers would value such an alternative that would improve privacy, security, and child safety. By contrast, on information and belief, Apple allows certain enterprise and public sector customers to offer versions of app stores with more curated apps to better protect privacy and security.
- 138. Notably, even when Apple was forced by legislation to allow third-party app stores to be offered on iPhones in the European Union, Apple reportedly invoked its alleged "rights" under a developer agreement to terminate the agreement of Epic when Epic sought to develop and launch the Epic Games Store for iOS in the European Union. 9 On information and belief, Apple reinstated Epic's developer account after public backlash over Apple's abuse of its position.
- 139. Apple's control over both app distribution and app creation gives Apple tremendous power over developers and over the apps and technologies available to iPhone users.

⁹ Jon Porter, *Apple kills Epic's iOS game store plans over App Store criticism*, The Verge (Mar. 6, 2024), https://www.theverge.com/2024/3/6/24092158/epic-apple-developer-account-terminated-digital-markets-act-alternative-ios-app-store.

- 140. For example, Apple designates as "private" the APIs needed to send Short Message Service, or SMS, text messages, which is a protocol used by mobile carriers to allow users to send text messages to other mobile phone numbers using their own mobile phone numbers. Developers have no technical means to access these private APIs, and, in any event would breach their developer agreement with Apple if they did—which could result in Apple terminating their ability to distribute any apps through the App Store. By denying third-party developers access to the necessary APIs, Apple blocks third-party iPhone apps from sending or receiving Short Message Service ("SMS") text messages even though this functionality is available through Apple Messages.
- 141. More generally, Apple's control over the App Store and native iOS app distribution also allows Apple to control the functionality of third-party apps and accessories. If an app includes functionality that Apple does not like (or, as with SMS text messaging, Apple wants to preserve solely for its own apps), Apple can and does exercise its discretion to simply block the app from the App Store.
- 142. Apple's dominance is such that neither app developers nor iPhone users can benefit from lower cost or higher quality means of distributing apps or purchasing and providing digital products and services. Instead, Apple guarantees that it continues to benefit from the contributions of third-party developers and other

platform participants while also protecting itself from the competitive threats and pressure those participants pose to Apple's smartphone monopoly.

D. Apple Unlawfully Maintains Its Monopoly Power

- 1. Apple harms competition by imposing contractual restrictions, fees, and taxes on app creation and distribution.
- 143. On information and belief, Apple produced to the DOJ internal documents that show that, soon after the iPhone's introduction and notwithstanding its success, Apple began to fear that disintermediation of its platform and the commoditization of the iPhone would threaten Apple's substantial profits from iPhone sales and related revenue streams.
- 144. Accordingly, Apple exercised its control of app creation and app distribution in key cases to cement the iPhone and App Store as the primary gateway to apps, products, and services. Apple often claims these rules and restrictions are necessary to protect user privacy or security, but Apple's documents tell a different story. In reality, Apple imposes certain restrictions to benefit its bottom line by thwarting direct and disruptive competition for its iPhone platform fees and/or for the importance of the iPhone platform itself.
- 145. Three aspects of Apple's efforts to protect and exploit its smartphone monopoly are worth noting.

- 146. *First*, as explained above, Apple exercises its control over app distribution and app creation to dictate how developers innovate for the iPhone, enforcing rules and contractual restrictions that stop or delay developers from innovating in ways that threaten Apple's power, even when the innovation would benefit iPhone users. In so doing, Apple influences the direction of innovation both on and off the iPhone.
- 147. *Second*, Apple drives iPhone users away from products and services that compete with or threaten Apple. In doing so, Apple increases the cost and friction of switching from the iPhone to another smartphone and generates extraordinary profits through subscription services (like Apple's proprietary music, gaming, cloud storage, and news services), advertisements within the App Store, and accessories like headphones and smartwatches.
- third parties in a variety of ways, including app fees and revenue-share requirements. For most of the last 15 years, Apple collected a tax in the form of a 30% commission on the price of any app downloaded from the App Store, a 30% tax on in-app purchases, and fees to access the tools needed to develop iPhone native apps in the first place. While Apple has reduced the tax it collects from some developers, Apple still extracts 30% from many app developers. Apple also generates substantial revenue by charging developers to help users find their apps in the App Store—

something that, for years, Apple told developers was part of the reason they paid a 30% tax in the first place. For example, Apple will sell keyword searches for an app to someone other than the owner of the app. Apple is able to command these rents from companies of all sizes, including some of the largest and most sophisticated companies in the world.

- 149. As Apple exercised its control of app distribution and app creation, Apple slowed its own iPhone innovation and extracted more revenue and profit from its existing customers through subscriptions, advertising, and cloud services. These services increase the cost of switching from the iPhone to another smartphone because many of these services—including Apple's proprietary gaming, cloud storage, and news service—are exclusive to the Apple ecosystem, penalizing iPhone users who try to use alternative services on another smartphone. Apple's conduct demonstrates that Apple recognized the importance of digital products and services for the success of the iPhone while at the same time it restricted the development and growth of non-iPhone products and services, including technologies that might make it easier for users to switch from the iPhone to a competing smartphone.
- 150. The cumulative effect of Apple's course of conduct has been to maintain and entrench Apple's smartphone monopoly at the expense of the users, developers, and other third parties who helped make the iPhone what it is today. Despite major technological changes over the years, Apple's power to control app

creation and distribution and extract fees from developers has remained largely the same, unconstrained by competitive pressures or market forces. That this conduct is impervious to competition reflects the success of Apple's unlawful and anticompetitive efforts to create and maintain its smartphone monopoly, the strength of that monopoly, and the durability of Apple's power, all of which allow Apple *not* to compete on the merits.

- 151. Apple's unlawful monopoly maintenance has taken many forms and continues to evolve today. Apple's anticompetitive and exclusionary course of conduct is exemplified by its contractual rules and restrictions targeting several products and services: super apps, cloud streaming apps, messaging apps, smartwatches, and digital wallets. By stifling these technologies, and many others, Apple entrenches its smartphone monopoly not by competing on the merits to make its products more valuable and attractive to users, but by discouraging innovation that threatens Apple's smartphone monopoly or the disintermediation of the iPhone. The cumulative anticompetitive effect of Apple's conduct is even more powerful than that of each exclusionary act standing alone.
 - 2. Super Apps: Apple prevented apps from threatening its smartphone monopoly by undermining mini programs that reduce the "stickiness" of the iPhone for consumers.
- 152. A super app is an app that can serve as a platform for smaller "mini" programs developed using programming languages such as HTML5 and JavaScript.

By using programming languages standard in most web pages, mini programs are cross platform, meaning they work the same on any web browser and on any device. Developers can therefore write a single mini program that works whether users have an iPhone or another smartphone.

- 153. Super apps can provide significant benefits to users. For example, a super app that incorporates a multitude of mini programs might allow users to easily discover and access a wide variety of content and services without setting up and logging into multiple apps, not unlike how Netflix and Hulu allow users to find and watch thousands of movies and television shows in a single app. As one Apple executive put it, "who doesn't want faster, easier to discover apps that do everything a full app does?" Restricting super apps makes users worse off and sacrifices the short-term profitability of iPhones for Apple.
- 154. Super apps also reduce user dependence on the iPhone, including the iOS operating system and Apple's App Store. This is because a super app is a kind of middleware that can host apps, services, and experiences without requiring developers to use the iPhone's APIs or code.
- 155. As users interact with a super app, they rely less on the smartphone's proprietary software and more on the app itself. Eventually, users become more willing to choose a different smartphone because they can access the same interface, apps, and content they desire on any smartphone where the super app is also present.

Moreover, developers can write mini programs that run on the super app without having to write separate apps for iPhones and other smartphones. This lowers barriers to entry for smartphone rivals, decreases Apple's control over third-party developers, and reduces switching costs.

- 156. For years, Apple denied its users access to super apps because it viewed them as fundamentally disruptive to existing app distribution and development paradigms and, ultimately, to Apple's monopoly power. Apple feared super apps because it recognized that as they become popular, demand for the iPhone is reduced. Apple used its control over app distribution and app creation to effectively prohibit developers from offering super apps instead of competing on the merits.
- 157. As reported by the DOJ, one Apple manager has explained that allowing super apps to become "the main gateway where people play games, book a car, make payments, etc." would "let the barbarians in at the gate" because when a super app offers popular mini programs, "iOS stickiness goes down"—*i.e.*, super apps make users less dependent on iPhones, which in turn would place greater competitive pressure on Apple to compete head-to-head with other smartphones.
- 158. Apple's fear of super apps is based on first-hand experience with enormously popular super apps in Asia. Apple does not want U.S. companies and U.S. users to benefit from similar innovations. For example, the DOJ has reported that, in an Apple Board of Directors presentation, Apple highlighted the

"[u]ndifferentiated user experience on [a] super platform" as a "major headwind" to growing iPhone sales in countries with popular super apps due to the "[l]ow stickiness" and "[l]ow switching cost."

- 159. For the same reasons, a super app created by a U.S. company would pose a similar threat to Apple's smartphone dominance in the United States. Apple is reported to have noted as a risk in 2017 that a potential super app created by a specific U.S. company would "replace[] usage of native OS and apps resulting in commoditization of smartphone hardware."
- 160. Apple did not respond to the advent of super apps by innovating and competing on the merits. Instead, Apple went to its playbook to exert its control over app distribution to stifle innovation by others. Apple strategically broadened, and aggressively enforced, its App Store Guidelines to effectively block apps from hosting mini programs. Apple's conduct disincentivized investments in mini program development and, on information and belief, caused U.S. companies to abandon or limit support for the technology in the United States.
- 161. Since at least 2017, Apple has arbitrarily imposed exclusionary requirements that unnecessarily and unjustifiably restrict mini programs and super apps. For example, Apple required apps in the United States to display mini programs using a flat, text-only list of mini programs. Apple also banned displaying mini programs with icons or tiles, such as descriptive pictures of the content or

service offered by the mini program. Apple also banned apps from categorizing mini programs, such as by displaying recently played games or more games by the same developer. These restrictions throttle the popularity of mini programs and ultimately make the iPhone worse because it discourages developers from creating apps and other content that would be attractive to iPhone users.

- 162. Apple also selectively enforced its contractual rules with developers to prevent developers from monetizing mini programs, hurting both users and developers. For example, Apple blocked mini programs from accessing the APIs needed to implement Apple's IAP system—even if developers were willing to pay Apple's monopoly tax. Similarly, Apple blocked developers' ability to use IAP methods other than directly using IAP. For instance, super apps could create a virtual currency for consumers to use in mini programs. But Apple selectively blocked this for super apps that threatened its iPhone dominance, even while allowing other, less-threatening apps to do so.
 - 3. Cloud Streaming Apps: Apple prevented developers from offering cloud gaming apps that reduce dependence on the iPhone's expensive hardware and allow greater ease of switching smartphone platforms.
- 163. Cloud streaming apps let users run a computationally intensive program without having to process or store the program on the smartphone itself. Instead, a user's smartphone leverages the computing power of a remote server, which runs the program and streams the result back to the phone. Cloud streaming allows

developers to bring cutting-edge technologies and services to smartphone consumers—including gaming and interactive artificial intelligence services—even if their smartphone includes hardware that is less powerful than an iPhone.

- 164. Cloud streaming has significant benefits for users. For example, Apple has promoted the iPhone 15 by promising that its hardware is powerful enough to enable "next-level performance and mobile gaming." But powerful hardware is unnecessary if games are played via cloud streaming apps. For a cloud game, the user experiences and plays the game on the smartphone, but the game is run by hardware and software in remote computing centers (the "cloud"). Thus, cloud gaming apps deliver rich gaming experiences on smartphones without the need for users to purchase powerful, expensive hardware. As a result, users with access to cloud streamed games may be more willing to switch from an iPhone to a smartphone with less expensive hardware because both smartphones can run desirable games equally well.
- 165. Cloud streaming also has significant advantages for developers. For example, instead of re-writing the same game for multiple operating systems, cloud platforms can act as middleware that allow developers to create a single app that works across iOS, Android, and other operating systems. Cloud streaming provides more and simpler options for offering subscriptions, collecting payments, and distributing software updates as well. All of this helps game developers reach

economies of scale and profitability they might not achieve without offering cloud gaming apps and reduces their dependence on iOS and Apple's App Store.

- 166. For years, Apple also blocked cloud gaming apps that would have given users access to desirable apps and content without needing to pay for expensive Apple hardware because this would threaten its monopoly power. As reported by the DOJ, internal documents from Apple showed, in Apple's own words, that it feared a world where "all that matters is who has the cheapest hardware" and consumers could "buy[] a [expletive] Android for 25 bux at a garage sale and . . . have a solid cloud computing device" that "works fine."
- streaming game—or any update to a cloud streaming game—be submitted as a stand-alone app for approval by Apple. Having to submit individual cloud streaming games for review by Apple increased the cost of releasing games on the iPhone and limited the number of games a developer could make available to iPhone users. For example, the highest quality games, referred to as AAA games, typically require daily or even hourly updates across different platforms. If these updates need to be individually approved by Apple, developers must either delay their software updates across all platforms or only update their games on non-iOS platforms, potentially making the iOS version of the game incompatible with other versions on other

platforms until Apple approves the update. Neither option is tenable for players or developers.

- 168. Until recently, Apple would have required users to download cloud streaming software separately for each individual game, install identical app updates for each game individually, and make repeated trips to Apple's App Store to find and download games. Apple's conduct made cloud streaming apps so unattractive to users that no developer designed one for the iPhone.
- 169. Apple undermines cloud gaming apps in other ways too, such as by requiring cloud games to use Apple's proprietary payment system and necessitating game overhauls and payment redesigns specifically for the iPhone. Apple's rules and restrictions effectively force developers to create a separate iOS-specific version of their app instead of creating a single cloud-based version that is compatible with several operating systems, including iOS. As a result, developers expend considerable time and resources re-engineering apps to bring cross-platform apps like multiplayer games to the iPhone.
- Apple to compete more vigorously against rivals. As one Apple manager recognized, cloud streaming eliminates "a big reason for high-performance local compute" and thus eliminates one of the iPhone's advantages over other smartphones because then "all that matters is who has the cheapest hardware." Accordingly, it reduces the need

for users to buy expensive phones with advanced hardware. This problem does not "stop at high-end gaming," but applies to "a number of high-compute requirement applications."

- 171. Apple's conduct made the iPhone worse because users missed out on apps and content. This conduct also cost Apple substantial revenues from third-party developers. At the same time, Apple also made other smartphones worse by stifling the growth of these platform-agnostic apps that could have been used on other smartphones. And, importantly, Apple stymied the emergence and growth of cloud streaming technologies that could lower the price that consumers pay for iPhones.
 - 172. Even today, no cloud streaming games are available on the iPhone.
 - E. Apple Insulates Itself from Competition on the Merits by Controlling Third Party Behavior and Innovation
 - 1. Messaging: Apple protects its smartphone monopoly by degrading and undermining platform-agnostic messaging apps and rival smartphones
- 173. Messaging apps allow smartphone users to communicate with friends, family, and other contacts and are often the primary way users interact with their smartphones.
- 174. Smartphone messaging apps operate using "protocols," which are the systems that enable communication and determine the features available when users interact with each other via messaging apps.

- 175. One important protocol used by messaging apps is SMS (used here to include "multimedia messaging service" or MMS). SMS offers a broad user network, but limited functionality. For example, all mobile phones can receive SMS messages, but SMS does not support modern messaging features, such as large files, edited messages, or reactions like a "thumbs up" or a heart emoji or symbol.
- 176. Many messaging apps—such as WhatsApp, Facebook Messenger, and Signal— use proprietary, internet-based protocols, which are sometimes referred to as OTT ("over the top") protocols. OTT messaging typically involves more secure and advanced features, such as encryption, typing indicators, read receipts, the ability to share rich media, and disappearing or ephemeral messages. While all mobile phones can send and receive SMS messages, OTT only works between users who sign up for and communicate through the same messaging app. As a result, a user cannot send an OTT message to a friend unless the friend also uses the same messaging app.
- and relative to Apple's own Apple Messages app. By doing so, Apple is knowingly and deliberately degrading quality, privacy, and security for its users. For example, Apple designates the APIs needed to implement SMS as "private," meaning third-party developers have no technical means of accessing them and are prohibited from doing so under Apple's contractual agreements with developers. As a result, third-

party messaging apps cannot combine the "text to anyone" functionality of SMS with the advanced features of OTT messaging. Instead, if an iPhone user wants to send somebody a message in a third-party messaging app, they must first confirm whether the person they want to talk to has the same messaging app and, if not, convince that person to download and use a new messaging app. By contrast, if an Apple Messages user wants to send somebody a message, they just type their phone number into the "To:" field and send the message because Apple Messages incorporates SMS and OTT messaging.

178. Apple also prohibits third-party developers from incorporating other important features into their messaging apps. For example, third-party messaging apps cannot continue operating in the background when the app is closed, which impairs functionality like message delivery confirmation. And when users receive video calls, third-party messaging apps cannot access the iPhone camera to allow users to preview their appearance on video before answering a call. By contrast, Apple Messages incorporates these features.

179. If third-party messaging apps could incorporate these features, they would be more valuable and attractive to users, and the iPhone would be more valuable to Apple in the short term. For example, by incorporating SMS, users would avoid the hassle of convincing someone to download a separate app before sending them a message. Third-party messaging apps could also offer the ability to schedule

SMS messages to be sent in the future, suggest replies, and support robust multidevice use on smartphones, tablets, and computers—as they have already done on Android.

- 180. Importantly, messaging apps benefit from significant network effects. As more people use the app, there are more people to communicate with through the app, which makes the app more valuable and in turn attracts even more users. Incorporating SMS would help third-party messaging apps grow their network and attract more users. Instead, Apple limits the reach of third-party messaging apps and reinforces network effects that benefit Apple.
- 181. In addition to degrading the quality of third-party messaging apps, Apple affirmatively undermines the quality of rival smartphones. For example, if an iPhone user messages a non-iPhone user in Apple Messages—the default messaging app on an iPhone—then the text appears to the iPhone user as a green bubble and incorporates limited and inferior functionality: the conversation is not encrypted, videos are pixelated and grainy, and users cannot edit messages or see typing indicators.
- 182. In addition to the materially worse functionality Apple causes for non-Phone messages, many non-iPhone users also experience social stigma, exclusion, and blame for "breaking" chats where other participants own iPhones. This effect is particularly powerful for certain demographics, like teenagers. This social pressure

imposes a switching cost, drives existing users to continue buying iPhones, and encourages other users (especially teens) to switch *to* the iPhone—solidifying Apple's smartphone dominance not because Apple has made its smartphone better, but because it has made communicating with other smartphones worse.

183. Apple recognizes that its conduct harms iPhone users and makes it more difficult to switch smartphones. For example, DOJ reports that, in 2013, Apple's Senior Vice President of Software Engineering explained that supporting platformagnostic OTT messaging in Apple Messages "would simply serve to remove [an] obstacle to iPhone families giving their kids Android phones" and that, in March 2016, Apple's Senior Vice President of Worldwide Marketing forwarded an email to Apple's Chief Executive Officer Tim Cook ("Cook") making the same point: "moving iMessage to Android will hurt us more than help us."

184. In 2022, Cook was asked whether Apple would fix iPhone-to-Android messaging. "It's tough," the questioner implored Mr. Cook, "not to make it personal but I can't send my mom certain videos." Mr. Cook's response? "Buy your mom an iPhone." 10

¹⁰ Jeannine Mancini, *Tim Cook Says 'Buy Your Mom An iPhone' If You Want To Communicate With Android Users — Compatibility Not A Priority For Apple*, Yahoo! Finance (Aug. 28, 2023), https://finance.yahoo.com/news/tim-cook-says-buy-mom-210347694.html?

185. As reported by DOJ, Apple recently blocked a third-party developer from fixing the broken cross-platform messaging experience in Apple Messages and providing end-to-end encryption for messages between Apple Messages and Android users. By rejecting solutions that would allow for platform-agnostic encryption, Apple continues to make iPhone users' less secure than they could otherwise be.

2. Smartwatches: Apple protects its smartphone monopoly by impeding the development of platform-agnostic smartwatches

- 186. Apple also uses smartwatches, a costly accessory, to prevent iPhone customers from choosing other phones. According to the DOJ, Apple limits the Apple Watch to the iPhone to prevent a negative "impact to iPhone sales."
- 187. Smartwatches must generally be paired with a smartphone to operate and unlock their full functionality, such as receiving and responding to emails and text messages or answering phone calls. Because of the significant cost of buying a smartwatch, users are less willing to choose a smartphone if it is not compatible with their smartwatch.
- 188. Apple's smartwatch—Apple Watch—is only compatible with the iPhone. So, if Apple can steer a user towards buying an Apple Watch, it becomes more costly for that user to purchase a different kind of smartphone because doing

so requires the user to abandon their costly Apple Watch and purchase a new, Android-compatible smartwatch or forego a smartwatch altogether.

189. By contrast, platform agnostic smartwatches would reduce iPhone users' dependence on Apple's proprietary hardware and software. If a user purchases a third-party smartwatch that is compatible with the iPhone and other smartphones, they can switch from the iPhone to another smartphone (or vice versa) by simply downloading the companion app on their new phone and connecting to their smartwatch via Bluetooth. Secondarily, as users interact with a smartwatch, *e.g.*, by accessing apps from their smartwatch instead of their smartphone, users rely less on a smartphone's proprietary software and more on the smartwatch itself. This also makes it easier for users to switch from an iPhone to a different smartphone.

190. Apple recognizes that driving users to purchase an Apple Watch, rather than a third-party platform-agnostic smartwatch, helps drive iPhone sales and reinforce the moat around its smartphone monopoly. For example, the DOJ reports that, in a 2019 email the Vice President of Product Marketing for Apple Watch acknowledged that Apple Watch "may help prevent iPhone customers from switching." Surveys have reached similar conclusions: many users say the other devices linked to their iPhone are the reason they do not switch to Android.

- 191. Apple also uses its control of the iPhone, including its technical and contractual control of critical APIs, to degrade the functionality of third-party platform agnostic smartwatches in at least three significant ways.
- 192. *First*, Apple deprives iPhone users with third-party smartwatches of the ability to respond to notifications.
- 193. **Second**, Apple inhibits third-party smartwatches from maintaining a reliable connection with the iPhone.
- 194. And *third*, Apple undermines the performance of third-party smartwatches that connect directly with a cellular network. In doing so, Apple constrains user choice and crushes innovation that might help fill in the moat around Apple's smartphone monopoly.
- 195. The ability to respond to notifications, *e.g.*, new messages or app alerts, directly from a smartwatch is one of the top considerations for smartwatch purchasers and one of the most used product features when it is available.
- 196. In 2013, when Apple started offering users the ability to connect their iPhones with third-party smartwatches, Apple provided third-party smartwatch developers with access to various APIs related to the Apple Notification Center Service, Calendar, Contacts, and Geolocation.
- 197. The following year, however, Apple introduced its Apple Watch and began limiting third-party access to new and improved APIs for smartwatch

functionality. For example, Apple prevents third-party smartwatches from accessing APIs related to more advanced Actionable Notifications, so iPhone users cannot respond to notifications using a third-party smartwatch. Instead, Apple provides third-party smartwatches access to more limited APIs that do not allow users to respond to a message, accept a calendar invite, or take other actions available on Apple Watch.

- 198. A reliable Bluetooth connection is essential for a smartwatch to connect wirelessly with a smartphone, and thereby function as a companion to the user's smartphone and unlock its full functionality. Apple prohibits third-party smartwatch developers from maintaining a connection even if a user accidentally turns off Bluetooth in the iPhone's control center, but gives its own Apple Watch that desired functionality. As a result, iPhone users have a worse experience when they try to use a third-party smartwatch with their iPhone.
- 199. Apple also requires users to turn on "Background App Refresh" and disable the battery-saving "Low Power Mode" in their iPhone settings for third-party smartwatches to remain consistently connected to their companion app, which is necessary to allow a user's iPhone and their smartwatch to update and share data about the weather or exercise tracking. Again, Apple does not impose similar requirements for Apple Watch, such that iPhone users have a worse experience using a third-party smartwatch than an Apple Watch.

200. Cellular-enabled smartwatches incorporate the ability to connect directly to a cellular network, allowing users to make calls, send messages, and download data even if their smartwatch is not paired to a smartphone. Cellularenabled smartwatches are popular with consumers, making up approximately 20% of Apple Watch sales. Apple Watch users can use the same phone number for their smartphone and smartwatch when connected to the cellular network. As a result, messages are delivered to both the user's smartphone and smartwatch, providing an integrated messaging experience. Although it is technologically feasible for Apple to allow an iPhone user with a third-party smartwatch to do the same, Apple instead requires these users to disable Apple's iMessage service on the iPhone in order to use the same phone number for both devices. This is a non-starter for most iPhone users. In practice, iPhone users with a third-party smartwatch must maintain separate phone numbers for the two devices, worsening their user experience, and may miss out on receiving messages sent to their primary iPhone number.

- 3. Digital Wallets: Apple restricts platform-agnostic digital wallets on the iPhone, reinforcing barriers to consumers switching to rival smartphones.
- 201. Digital wallets with tap-to-pay functionality are an important feature of a digital wallet for smartphones. That functionality will become ever more indispensable as U.S. consumers continue to expand their use of tap-to-pay technologies. Apple, however, has used its control over app creation, including its

technical and contractual control over API access, to effectively block third-party developers from creating digital wallets for the iPhone with that important functionality. As a result, Apple maintains complete control over how users make tap-to-pay payments with their iPhone. Apple also deprives users of the benefits and innovations third-party wallets would provide so that it can protect Apple's most important and successful business, the iPhone.

- 202. Absent Apple's conduct, platform-agnostic digital wallets could also be used to manage and pay for subscriptions and in-app purchases.
- 203. Apple Wallet is Apple's proprietary digital wallet on the iPhone. Apple Wallet incorporates Apple's proprietary payment system Apple Pay, which processes digital payments on the web, in apps, and at merchant points of sale.
- 204. Today, Apple Wallet offers users a way to make these payments using their iPhone. But Apple envisions that Apple Wallet will ultimately supplant multiple functions of physical wallets to become a single app for shopping, digital keys, transit, identification, travel, entertainment, and more.
- 205. DOJ reports that Apple well knows that, as users rely on Apple Wallet for payments and beyond, it "drive[s] more sales of iPhone and increase[s] stickiness to the Apple ecosystem" because Apple Wallet is only available on the iPhone. Thus, switching to a different smartphone requires leaving behind the familiarity of an

everyday app, setting up a new digital wallet, and potentially losing access to certain credentials and personal data stored in Apple Wallet.

- 206. Platform-agnostic digital wallets would offer an easier, more seamless, and potentially more secure way for users to switch from the iPhone to another smartphone because users could continue to use the same wallet, with the same cards, IDs, payment histories, peer-to-peer payment contacts, and other information.
- 207. The most important function for attracting users to a digital wallet for smartphones is the ability to offer tap-to-pay, *i.e.*, the ability to make in-person payments by tapping your smartphone on a payment terminal. Apple uses its control over app creation and API access to selectively prohibit developers from accessing the NFC hardware needed to provide tap-to-pay through a digital wallet app.
- 208. Apple Wallet is the only app on the iPhone that can use NFC to facilitate tap-to-pay. While Apple actively encourages banks, merchants, and other parties to participate in Apple Wallet, Apple simultaneously exerts its smartphone monopoly to block these same partners from developing better payment products and services for iPhone users. And because many users already use apps created by their preferred financial institutions, if these financial institutions offered digital wallets, users would have access to new apps and technologies without needing to share their private financial data with additional third parties, including Apple.

- 209. In the short term, these improved features would make the iPhone more attractive to users and profitable for Apple.
- 210. Conversely—and as Apple knows and intends—the absence of platform-agnostic digital wallets with tap-to-pay capability on the iPhone makes it harder for iPhone users to switch to a different smartphone platform.
- 211. Apple also uses its smartphone monopoly to extract payments from banks, which need to access customers that use digital wallets on iPhones. Whereas payment apps offered by Samsung and Google are free to issuing banks, Apple leverages its market dominance and exclusionary treatment of competing payment apps to charge issuing banks 15 basis points (0.15%) for each credit card transaction mediated by Apple Pay. Apple's fees are a significant expense for issuing banks and cut into funding for features and benefits that banks might otherwise offer smartphone users. On information and belief, Apple Pay facilitated nearly \$200 billion in transactions in the United States in 2022. The volume of such transactions will only increase in the future.
- 212. Multiple app developers have sought direct NFC access for their payment or wallet apps. Yet, DOJ reports, Apple prohibits these developers from incorporating tap-to-pay functionality in their apps for fear that doing so would "be one way to disable [A]pple [P]ay trivially," leading to the "proliferation of other

payment apps" that might operate platform-agnostic and ultimately undermine Apple's smartphone monopoly.

- 213. There is no technical limitation on providing NFC access to developers seeking to offer third-party wallets. For example, Apple allows merchants to use the iPhone's NFC antenna to *accept* tap-to-pay payments from consumers. Apple also acknowledges it is technically feasible to enable an iPhone user to set another app (*e.g.*, a bank's app) as the default payment app, and Apple intends to allow this functionality in Europe.
- 214. Apple further impedes the adoption of digital wallets by restricting others from offering the same ability to authenticate digital payment options on online checkout pages. By limiting the ability of third-party wallets to provide a simple, fast, and comprehensive solution to online purchasing, Apple further undermines the viability of such wallets.
- 215. Apple also blocks other digital wallets from serving as an alternative to Apple's IAP. This prevents these wallets from increasing their attractiveness and improving the overall user experience on the iPhone by offering consumer experiences that may include use of rewards points in purchasing, digital receipts, returns, loyalty programs, and digital coupons for purchases of relevant subscriptions and digital goods. Apple even prohibits developers on its App Store

from notifying users in the developer's app that cheaper prices for services are available using alternative digital wallets or direct payments.

216. Apple's conduct reflects its knowing degradation of the experience of its own users by blocking them from accessing wallets that would have better or different features. In so doing, Apple cements reliance on the iPhone and also imposes fees on a large and critical slice of all digital wallet NFC transactions, which the U.S. Consumer Financial Protection Bureau estimates will grow to \$451 billion by 2028.

F. Apple Has Dmployed Similarly Exclusionary and Monopolistic Strategies with Respect to Other Apps and Services

- 217. The exclusionary and anticompetitive acts described above are only part of Apple's ongoing efforts to build and maintain its smartphone monopoly by selectively blocking innovations that threaten its dominance.
 - 218. For example, on information and belief:
 - Apple uses restrictions in sales channels to impede the sale and distribution of rival smartphones;
 - Apple undermines third-party location trackable devices that fully function across different smartphone platforms;
 - Apple impairs third-party, platform-agnostic video communications apps, favoring its own FaceTime app;
 - Apple limits the capabilities of third-party iOS web browsers, including by requiring that they use Apple's browser engine, WebKit;

- Apple has placed protocols around new "eSIM" technology that may make it unnecessarily difficult for an iPhone user to transition to a different smartphone while still maintaining the same phone number;
- Apple has impeded platform-agnostic cloud storage apps in order to steer iPhone users into iCloud, making data transfer between different devices more difficult than necessary; and
- Apple has worsened its users' experience by making it difficult for iPhone users to use superior voice and AI assistants and steering users to use Siri as a voice assistant.
- 219. Apple continues to evolve and shift its anticompetitive behavior to protect its monopoly power.
- 220. For example, in recent years, Apple has increasingly moved into offering its own subscription services, including news, games, video, music, cloud storage, and fitness subscriptions that could be used to keep users tethered to the platform. These subscription services and other ancillary fees are a significant part of Apple's net revenue. These subscriptions services can also increase switching costs among iPhone users. If an Apple user can only access their subscription service on an iPhone, they may experience significant costs, time, lost content, and other frictions if they attempt to switch to a non-Apple smartphone or subscription service.
- 221. These subscription services can also increase Apple's power over content creators and newspapers, among others, by exerting control over how audiences access their work, decreasing traffic to their websites and apps, and positioning Apple as the middleman or tollbooth operator in the relationship between

creators and users. In so doing, Apple takes on outsize importance and control in the creative economy, which may diminish incentives to fund, make, and distribute artistic expression.

- 222. Apple has also attempted to undermine platform-agnostic technologies like digital car keys in ways that benefit Apple but harm consumers. For example, Apple has required developers to add digital keys developed for their own apps to Apple Wallet as well. The default status of Apple Wallet steers users to the Apple Wallet, rather than allowing third parties to present digital car keys only in their own platform-agnostic app, increasing dependence on Apple and the iPhone whenever they use their car. At the same time, it decreases the incentives of automakers to innovate because automakers are forced to share data with Apple and prevented from differentiating themselves as they could absent Apple's conduct.
- 223. Apple's smartphone dominance also extends to CarPlay, an Apple infotainment system that enables a car's central display to serve as a display for the iPhone and enables the driver to use the iPhone to control maps and entertainment in the car.
- 224. Apple parlayed its dominance of the smartphone market into dominance of the automotive infotainment systems—a move that one outlet aptly recognized as a "Trojan Horse Into the Automotive Industry."¹¹

¹¹ Kif Leswing, Apple's new car software could be a trojan horse into the

- 225. Indeed, in 2022, Apple engineering manager Emily Schubert revealed that 98% of new cars in the United States come with CarPlay installed—and that a reported 79% of U.S. buyers would only buy a car if it supported CarPlay.
- 226. After leveraging its smartphone dominance to car infotainment systems, Apple has told automakers that the next generation of Apple CarPlay will take over all of the screens, sensors, and gauges in a car, forcing users to experience driving as an iPhone-centric experience if they want to use any of the features provided by CarPlay. Here too, Apple leverages its iPhone user base to exert more power over its trading partners, including American carmakers, in future innovation. By applying the same playbook of restrictions to CarPlay, Apple further locks-in the power of the iPhone by preventing the development of other disintermediating technologies that interoperate with the smartphone, but reside off device.
- 227. As reported in 2022, "The auto industry faces an unappealing choice: Offer CarPlay and give up potential revenue and the chance to ride a major industry shift, or spend heavily to develop their own infotainment software and cater to a potentially shrinking audience of car buyers who will purchase a new vehicle without CarPlay."¹²

automotive industry, CNBC (July 22, 2022), https://www.cnbc.com/2022/07/22/apple-carplay-could-be-a-trojan-horse-into-the-automotive-industry.html?&qsearchterm=.

VI. ANTICOMPETITIVE EFFECTS

A. Apple's Conduct Harms the Competitive Process

- 228. As described above, Apple protects its monopoly power in smartphones and performance smartphones by using its control over app distribution and app creation to suppress or delay apps, innovations, and technologies that would reduce user switching costs or simply allow users to discover, purchase, and use their own apps and content without having to rely on Apple. As a result, Apple faces less competition from rival smartphones and less competitive pressure from innovative, platform-agnostic technologies not because Apple makes its own products better but because it makes other products worse. With the benefit of less competition, Apple extracts extraordinary profits and regulates innovation to serve its interests. This leaves all smartphone users worse off, with fewer choices, higher prices and fees, lower quality smartphones, apps, and accessories, and less innovation from Apple and others. Left unchallenged, Apple will continue to use and strengthen its smartphone monopoly to dictate how companies can create and distribute apps in the future so that they cannot threaten Apple's smartphone monopolies.
- 229. Apple's conduct has resulted in less choice for smartphone users.

 Today, only two companies (Google and Samsung) remain as meaningful competitors to Apple in the performance smartphone market in the United States

- 230. Even when users consider these alternatives, Apple's conduct has increased the technical, behavioral, monetary, and other costs of switching from an iPhone to an alternative smartphone. This undermines competition and entrenches Apple's monopoly power.
- 231. For example, according to user surveys, one of the biggest reasons iPhone users do not switch to rival smartphones today is to avoid the problems Apple has created for platform-agnostic messaging. Likewise, Apple exercised its control over app distribution and app creation to impede the development and growth of super apps, depriving users of technology that would have facilitated switching by decreasing user's dependence on Apple and the iPhone. Apple took a similar approach to cloud streaming apps, delaying or suppressing technology that would have made it easier for users to switch to cheaper smartphones. Apple also used its control over app creation, including its control over critical APIs, to impose technical and contractual restrictions on messaging apps, third-party smartwatches, and digital wallets, undermining platform-agnostic technologies that would have helped users overcome switching costs and friction and ultimately increased smartphone competition.
- 232. Apple's conduct has delayed or suppressed the emergence of platform-agnostic technologies that would put competitive pressure on Apple's ability to extract extraordinary profits from users and developers. For example, if developers

could distribute their programs through super apps or cloud streaming apps, rather than the App Store, it would put competitive pressure on Apple's ability to control app distribution and app creation as well as the taxes Apple imposes on developers who want to distribute apps to iPhone users. Similarly, third-party digital wallets, or other apps with tap-to-pay functionality, would benefit users and developers by putting more competitive pressure on Apple as well. For example, digital wallets could eventually provide developers an alternative way to process payments and manage customer relationships, forcing Apple to compete more aggressively by lowering fees and improving quality, which would ultimately benefit users. Instead, Apple continues to exert its power over customers and financial institutions when users pay for something with their phone—in the App Store, in an app, or increasingly in the physical world with tap-to-pay.

233. Apple's conduct has harmed users in other ways. For example, third-party digital wallets would reduce Apple's ability to charge banks high fees when users make payments using Apple Wallet, which ultimately cost consumers through higher prices or other reductions in quality. Alternative digital wallets could also provide smartphone users better rewards, *e.g.*, cash back, as well as a more private, secure payment experience from a user's preferred financial institution rather than being forced to go through Apple. But these tap-to-pay digital wallet products and services do not exist today because of Apple.

234. Apple's conduct has made its own products worse, sacrificing the shortterm profits Apple could earn from improving the iPhone in order to preserve the long-term value of maintaining its monopoly. In a competitive market, Apple would compete aggressively to support the development of popular apps and accessories for iPhone users, which would in turn make iPhones more attractive to users and more valuable. But Apple takes steps to delay or suppress platform-agnostic technologies that it recognizes would be popular with users, such as super apps and cloud streaming apps, because of the threat they pose to Apple's smartphone monopolies. As a result, several developers have abandoned plans to develop super apps and cloud-based gaming apps even after making substantial investments in bringing them to market. Apple's conduct may have also slowed the development of innovative, high-compute apps related to education, artificial intelligence, and productivity as well. Apple has also impeded innovation by third-party smartwatches such that manufacturers have limited the functionality of their smartwatches for iPhone users, suspended support for iPhone compatibility because of Apple's restrictions, or canceled development of platform-agnostic smartwatches altogether. At least one company's canceled smartwatch formed part of its overall wearables strategy, including future development of virtual-reality technology. Similarly, Apple degrades third-party messaging apps, even though it makes platform-agnostic

messaging less private and less secure for iPhone users, because doing so raises switching costs.

- 235. Apple's conduct has harmed other smartphone users, too. Because of the resources and risks required to maintain different features across different smartphones, many potential super app, mini program, and other developers do not implement features prohibited by Apple even on other smartphones. For example, prospective digital wallet providers, including U.S. banks, have abandoned the development of digital-wallet apps for either Apple or other smartphones. Another company decided not to offer users an innovative digital car key in part because Apple required that company to add any features related to the key into Apple Wallet rather than allowing that company to put its key solely in its own app. Other developers have shrunk, shuttered, or abandoned plans to launch super apps, cloud-streamed gaming apps, smartwatches, and other apps. As a result, all smartphone users enjoy lower quality smartphones, less innovation, and less choice.
- 236. Apple's documents and conduct show that Apple is motivated by the anticompetitive purpose of building or maintaining monopoly power in the relevant markets.
- 237. For example, Apple sacrificed substantial revenues it could have earned from super apps, mini programs, cloud streaming apps, and other third-party apps and accessories. In particular, mobile gaming already accounts for a large and

growing portion of Apple's revenue. Popular cloud streamed gaming apps would offer iPhone users access to popular services (including games) and in turn generate significant revenue for Apple through subscriptions and in-app purchases.

- 238. Instead, Apple preferred the long-term benefit of reduced smartphone competition to the revenue it would generate from cloud gaming, super apps, and mini programs or the quality (and consumer demand) increase that would flow from this innovation. Apple has also used its control over app distribution and app creation to selectively undermine platform-agnostic technologies, not because this helps protect users but because it helps protect Apple.
- 239. The harms to smartphone competition caused by Apple's conduct are amplified by Apple's decision to grant itself exclusive distribution rights to iPhone users through the Apple App Store. If Apple allowed users to access apps in other ways, users could choose an app store that did not restrict super apps or mini programs, even if Apple ran its App Store the same way it does today. Apple does not allow that choice, however, because if it did developers could write their programs for any smartphone rather than specifically for iOS, just as internet browsers and Apple's QuickTime allowed developers to write programs that worked on a variety of operating systems not just Windows. That would lower users' switching costs and reduce users' and developers' dependence on Apple and the iPhone.

240. Apple's smartphone monopoly gives it many levers to maintain its power even in the face of interventions focused on eliminating or disciplining specific anticompetitive practices. This is because Apple's iPhone monopoly, secured by its anticompetitive conduct, grants it the power to set the rules by which most smartphone users buy digital and hardware products, and by which developers are allowed to sell these same products to users. If Apple is forced to change some of these rules, it has the power to adopt new rules, restrictions, or features that reinforce Apple's monopoly and harm competition in other ways. For example, Apple has stated plans to adopt RCS due to market and international regulatory pressure. But Apple continues to contractually restrict third parties from accessing other APIs and features that would enable platform-agnostic messaging apps. In another instance, Apple was enjoined from enforcing certain anti-steering provisions in its agreements with developers. In response, Apple simply created a different set of onerous restrictions on app developers to achieve a similar result. In other cases, Apple has used its control over app distribution to force companies to comply with Apple's policies that may contradict local laws by delaying the review of the offending companies' apps.

B. Apple Has Every Incentive to Use its Monopoly Playbook in the Future.

241. Apple's conduct does not just impact the past and present but poses significant risk to the development of new innovations. Apple may use its

smartphone monopoly playbook to acquire or maintain power over next-frontier devices and technologies. As Apple grows its dominance, Apple may continue delaying or stifling the innovations of platform-agnostic companies, in order to lock users into Apple devices.

- 242. Apple has countless products and services—AirPods, iPads, Music, Apple TV, photos, maps, iTunes, CarPlay, AirDrop, Apple Card, and Cash. These provide future avenues for Apple to engage in anticompetitive conduct and the ability to circumvent remedies. Appropriate forward-looking remedies are necessary to ensure that Apple cannot use these products and services to further entrench its monopoly power.
- 243. Apple's conduct extends beyond just monopoly profits and even affects the flow of speech. For example, Apple is rapidly expanding its role as a TV and movie producer and has exercised that role to control content.
- 244. Apple has also attempted to use its monopoly to collect user data and stifle innovation in the automotive industry by, among other things, impeding the development of digital key technologies by requiring them to be offered in Apple's proprietary wallet product and creating new single points of power over emerging uses of the iPhone. These acts further reinforce Apple's power in the iPhone by locking in Apple's services and excluding other alternative technologies that have the potential to disintermediate Apple's iPhone.

245. Finally, Apple's monopolization of smartphone market gives it tremendous power over the lives of millions of Americans. Today, Apple uses that power to undermine rival smartphones, suppress innovative technologies, and stymic consumer choice. Tomorrow, Apple may use its power to force its own users (and their data) to become its next profitable product.

VII. PRIVACY, SECURITY, AND OTHER ALLEGED COUNTERVAILING FACTORS DO NOT JUSTIFY APPLE'S ANTICOMPETITIVE CONDUCT

- 246. There are no valid, procompetitive benefits of Apple's exclusionary conduct that would outweigh its anticompetitive effects. Apple's moat building has not resulted in lower prices, higher output, improved innovation, or a better user experience for smartphone users.
- 247. Apple markets itself on the basis of privacy and security to differentiate itself from what competition is left in the smartphone market. But this does not justify Apple's monopolistic and anticompetitive conduct. Apple imposes contractual restraints on app creation and distribution, imposes hefty fees on many types of smartphone interactions, and conditionally restricts API access on its smartphone platform simply because it can. There are limited if any competitive constraints on this conduct. As a point of comparison, Apple does not engage in such conduct on its Mac laptops and computers. It gives developers the freedom to distribute software directly to consumers on Mac without going through an Apple-

controlled app store and without paying Apple app store fees. This still provides a safe and secure experience for Mac users, demonstrating that Apple's control over app distribution and creation on the iPhone is substantially more restrictive than necessary to protect user privacy and security.

248. In fact, many alternative technologies that Apple's conduct suppresses would enhance user security and privacy. For example, Apple's conduct targeting digital wallets forces users to share information with Apple even if they would prefer to share that information solely with their bank, medical provider, or other trusted third party. In particular, when an iPhone user provisions a credit or debit card into Apple Wallet, Apple intervenes in a process that could otherwise occur directly between the user and card issuer introducing an additional point of failure for privacy and security. Likewise, super apps or alternative app stores could offer users and their families a more curated selection of apps that better protect user privacy and security. Indeed, Apple allows enterprise and public sector customers to offer more curated app stores on employee iPhones because it better protects privacy and security.

249. Apple is also willing to make the iPhone less secure and less private if that helps maintain its monopoly power. For example, text messages sent from iPhones to Android phones are unencrypted as a result of Apple's conduct. If Apple wanted to, Apple could allow iPhone users to send encrypted messages to Android

users while still using iMessage on their iPhone, which would instantly improve the privacy and security of iPhone and other smartphone users.

- 250. Similarly, Apple is willing to sacrifice user privacy and security in other ways so long as doing so benefits Apple. For example, Apple allows developers to distribute apps through its App Store that collect vast amounts of personal and sensitive data about users—including children—at the expense of its users' privacy and security. Apple also enters agreements to share in the revenue generated from advertising that relies on harvesting users' personal data. For example, Apple accepts massive payments from Google to set its search engine as the default in the Safari web browser even though Apple recognizes that other search engines better protect user privacy.
- 251. Finally, Apple selectively enforces its rules and contractual restrictions for app distribution and app creation. For example, when it benefits Apple to do so, Apple permits developers to introduce mini programs, stream content from the cloud, use virtual currency, and receive special permissions or access APIs not automatically available to everyone.
- 252. Ultimately, Apple chooses to make the iPhone private and secure when doing so benefits Apple; Apple chooses alternative courses when those courses help Apple protect its monopoly power. Apple's conduct underscores the pretextual

nature of any claim that Apple's conduct is justified by protecting user privacy or security.

VIII. CLASS ACTION ALLEGATIONS

253. Plaintiffs bring this action on behalf of themselves and as a class action under Fed. R. Civ. P. 23(b)(1), (2) (for injunctive relief), and (b)(3) (for damages) on behalf of all persons and entities who fall within the definition of the following Classes:

Nationwide Class: All iPhone purchasers, either individuals or entities, who purchased iPhones directly from Apple in the United States, other than for resale, anytime between April 3, 2020, and the present (collectively, the "Class" or the "Nationwide Class").

Arizona Class: All iPhone purchasers, either individuals or entities, who purchased iPhones directly from Apple in Arizona, other than for resale, anytime between April 4, 2020, and present (collectively, the "Arizona Class").

California Class: All iPhone purchasers, either individuals or entities, who purchased iPhones directly from Apple in California, other than for resale, anytime between April 4, 2020, and present (collectively, the "California Class").

Connecticut Class: All iPhone purchasers, either individuals or entities, who purchased iPhones directly from Apple in Connecticut, other than for resale, anytime between April 4, 2020, and present (collectively, the "Connecticut Class").

Maine Class: All iPhone purchasers, either individuals or entities, who purchased iPhones directly from Apple in Maine, other than for resale, anytime between April 4, 2020, and present (collectively, the "Maine Class").

Michigan Class: All iPhone purchasers, either individuals or entities, who purchased iPhones directly from Apple in Michigan, other than for resale,

anytime between April 4, 2020, and present (collectively, the "Michigan Class").

Nevada Class: All iPhone purchasers, either individuals or entities, who purchased iPhones directly from Apple in Nevada, other than for resale, anytime between April 4, 2020, and present (collectively, the "Nevada Class").

New Jersey Class: All iPhone purchasers, either individuals or entities, who purchased iPhones directly from Apple in New Jersey, other than for resale, anytime between April 4, 2020, and present (collectively, the "New Jersey Class").

New York Class: All iPhone purchasers, either individuals or entities, who purchased iPhones directly from Apple in New York, other than for resale, anytime between April 4, 2020, and present (collectively, the "New York Class").

Oregon Class: All iPhone purchasers, either individuals or entities, who purchased iPhones directly from Apple in Oregon, other than for resale, anytime between April 4, 2020, and present (collectively, the "Oregon Class").

Wisconsin Class: All iPhone purchasers, either individuals or entities, who purchased iPhones directly from Apple in Wisconsin, other than for resale, anytime between April 4, 2020, and present (collectively, the "Wisconsin Class").

- 254. Each Class excludes the Defendant and any of its current or former parents, subsidiaries, affiliates, officers, directors, and employees. The Classes also exclude all judicial officers presiding over this action and their immediate family members and staff, and any juror assigned to this action.
- 255. The Nationwide Class is represented by Plaintiffs Balogh, Bauman, Collins, Good, Kouyate, Mason, Morgan, Rabadi, Stuck, Sutters, Styron, and Webb.
 - 256. The Arizona Class is represented by Plaintiff Morgan.

- 257. The California Class is represented by Plaintiff Mason.
- 258. The Connecticut Class is represented by Plaintiffs Rabadi and Good.
- 259. The Maine Class is represented by Plaintiff Balogh.
- 260. The Michigan Class is represented by Plaintiff Collins.
- 261. The Nevada Class is represented by Plaintiff Webb.
- 262. The New Jersey Class is represented by Plaintiff Bauman.
- 263. The New York Class is represented by Plaintiffs Kouyate and Styron.
- 264. The Oregon Class is represented by Plaintiff Stuck.
- 265. The Wisconsin Class is represented by Plaintiff Sutters.
- 266. Apple has sold iPhones to members of the Classes across the United States, including in Arizona, California, Connecticut, Maine, Michigan, Nevada, New Jersey, New York, Oregon, and Wisconsin during the relevant period. Defendant, due to its power monopoly position, has charged supra-competitive prices for that service/product.
- 267. Due to the nature of the trade and commerce involved, the Classes consist of millions of members. The exact number and their identities are known to Apple through its Apple ID system, which it uses, *inter alia*, to keep track of purchasers of Apple devices. Thus, the Classes are so numerous that joinder of all members is impracticable.

- 268. There are predominating questions of law and fact common to the Classes, including:
 - a. Whether Defendant has unlawfully monopolized, attempted to monopolize, or conspired to monopolize any of the relevant markets asserted herein, including by way of the contractual terms, policies, practices, mandates, and restraints described herein;
 - b. Whether competition in the relevant markets has been restrained and harmed by Apple's conspiracy, monopolization, or attempted monopolization, of these markets;
 - c. Whether consumers and members of the Classes have been damaged by Defendant's conduct;
 - d. The amount of any damages; and
 - e. The nature and scope of injunctive relief necessary to restore a competitive market.
- 269. Plaintiffs and the Classes were, during the Class period, direct purchasers of iPhones. Their respective claims are typical of the Classes that they seek to represent, and the named Plaintiffs will fairly and adequately protect the interests of the Classes that they seek to represent.
- 270. Plaintiffs are represented by counsel who are competent and experienced in the prosecution of antitrust and class action litigation.
- 271. No Plaintiff has an interest antagonistic to those of the proposed class, and those interests do not conflict with the interests of the proposed class members they seek to represent.

- 272. Given the high cost of establishing Defendant's monopoly or attempted monopolization has violated the antitrust laws (including, but not limited to, substantial expert witness costs and attorneys' fees), a class action is the only economically feasible means for any Class member to enforce their statutory rights.
- 273. The prosecution of separate actions by individual members of the Classes would also create a risk of inconsistent or varying adjudications, establishing incompatible standards of conduct for Defendant.
- 274. Defendant has acted or refused to act on grounds that apply generally to the Classes, such that final injunctive relief or corresponding declaratory relief is appropriate respecting the Classes as a whole.
- 275. The questions of law and fact common to the members of the Classes predominate over any questions affecting only individual members, including legal and factual issues relating to liability and damages.
- 276. A class action is superior to other available methods for the fair and efficient adjudication of this controversy. The Classes are readily ascertainable and is one for which records exist within the control of Apple. Prosecution as a class action will eliminate the possibility of duplicative litigation. Treatment as a class action will permit a large number of similarly situated persons to adjudicate their common claims in a single forum simultaneously, efficiently, and without the duplication of effort and expense that numerous individual actions would engender.

This class action presents no difficulties in management that would preclude maintenance as a class action.

277. In the alternative, Plaintiffs bring this action on behalf of themselves and as a class action under Fed. R. Civ. P. 23(c)(4) (for determination of issues) on behalf of all persons and entities who fall within the definition of the above Classes with respect to one or more of the issues identified above.

IX. ANTITRUST INJURY

278. During the Class Period, Plaintiffs and members of the Classes directly purchased iPhones from Defendant – either through Defendant's retail stores or from Defendant's online store. Because of Defendant's anticompetitive conduct, Plaintiffs and members of the Classes were forced to pay more for iPhones than they would have if Defendant had not monopolized or attempted to monopolize the market for smartphones in the United States. Defendant therefore has caused each Plaintiff and other Class members to suffer overcharge damages. Because of Defendant's continuing conduct in using its market power, contractual restrictions, fees, API restrictions, and other means to monopolize the relevant markets, Plaintiffs and members of the Classes are reasonably likely to incur future overcharges for iPhones. Both the actual harm and the threat of future harm are cognizable antitrust injuries directly caused by Defendant's violation of federal and state antitrust laws,

including its monopolization or attempted monopolization of the relevant markets, as alleged herein.

279. Defendant, through its unlawful conduct alleged herein, increased prices, reduced choice for purchasers, and caused antitrust injury to purchasers in the form of overcharges. Plaintiffs and members of the Classes have sustained, and continue to sustain, significant losses in the form of artificially inflated prices caused by Defendant's anticompetitive activity. The full amount of such overcharge damages will be calculated after discovery and upon proof at trial.

280. Unless Defendant's anticompetitive conduct is stopped, Plaintiffs and the Classes will incur future overcharges in their direct purchases of iPhones.

X. CLAIMS FOR RELIEF

COUNT ONE

(Monopolization of the Performance Smartphone Market in the United States in Violation of the Sherman Act, 15 U.S.C. §2)

- 281. Plaintiffs, on behalf of themselves and the Nationwide Class that they represent, incorporate the allegations of paragraphs 1 through 280 above as if fully set forth herein.
- 282. Performance smartphones in the United States is a relevant antitrust market, and Apple has monopoly power in that market.
- 283. Apple has willfully monopolized the performance smartphone market in the United States through an exclusionary course of conduct and the

anticompetitive acts described herein. Each of Apple's actions individually and collectively increased, maintained, or protected its performance smartphone monopoly.

- 284. Apple's anticompetitive acts include, but are not limited to, its contractual restrictions against app creation, distribution, and access to APIs that have impeded apps and technologies including, but not limited to, super apps, cloud streaming, messaging, wearables, and digital wallets. The areas identified in this complaint reflect a non-exhaustive list of recent anticompetitive acts but as technology advances, both the technologies being impeded, and the specific manner of impediment may shift in response to technological and regulatory change consistent with Apple's past conduct.
- 285. While each of Apple's acts is anticompetitive in its own right, Apple's interrelated and interdependent actions have had a cumulative and self-reinforcing effect that has harmed competition and the competitive process. Apple's anticompetitive acts have had harmful effects on competition and consumers.
- 286. Apple's exclusionary conduct lacks a procompetitive justification that offsets the harm caused by Apple's anticompetitive and unlawful conduct.
- 287. Plaintiffs and members of the Nationwide Class have suffered injury flowing from the anticompetitive effects of Apple's conduct, including measurable damages in an amount to be calculated at trial, and they face an ongoing threat of

new injuries absent an injunction restraining Apple's monopolization of the performance smartphone market.

288. Plaintiffs seek all remedies available under the Clayton Act, including, without limitation, the following: (a) injunctive and other equitable relief pursuant to Clayton Act Section 16, 15 U.S.C. §26; (b) treble damages pursuant to Clayton Act Section 4, 15 U.S.C. §15; (c) and other remedies as the Court may deem appropriate and the interests of justice may require.

COUNT TWO

(Attempted Monopolization of the Performance Smartphone Market in the United States in Violation of the Sherman Act, 15 U.S.C. §2)

- 289. Plaintiffs, on behalf of themselves and the Nationwide Class that they represent, incorporate the allegations of paragraphs 1 through 280 above as if fully set forth herein.
- 290. Performance smartphones in the United States is a relevant antitrust market, and Apple has attempted to monopolize that market.
- 291. Apple has attempted to monopolize the performance smartphone market in the United States through an exclusionary course of conduct and the anticompetitive acts described herein. Each of Apple's actions individually and collectively increased Apple's market power in the performance smartphone market.
- 292. Apple's anticompetitive acts include, but are not limited to, its contractual restrictions against app creation, distribution, and access to APIs that

have impeded apps and technologies including, but not limited to, super apps, cloud streaming, messaging, wearables, and digital wallets. The areas identified in this complaint reflect a non-exhaustive list of recent anticompetitive acts but as technology advances, both the technologies impeded, and the specific manner of impediment may shift in response to technological and regulatory change consistent with Apple's past conduct.

- 293. While each of Apple's acts is anticompetitive in its own right, Apple's interrelated and interdependent actions have had a cumulative and self-reinforcing effect that has harmed competition and the competitive process.
- 294. In undertaking this course of conduct, Apple has acted with specific intent to monopolize, and to destroy effective competition in, the performance smartphone market in the United States. There is a dangerous probability that, unless restrained, Apple will succeed in monopolizing the performance smartphone market in the United States, in violation of Section 2 of the Sherman Act.
- 295. Plaintiffs and members of the Nationwide Class have suffered injury flowing from the anticompetitive effects of Apple's conduct, including measurable damages in an amount to be calculated at trial, and they face an ongoing threat of new injuries absent an injunction restraining Apple's attempted monopolization of the performance smartphone market.

296. Plaintiffs seek all remedies available under the Clayton Act, including, without limitation, the following: (a) injunctive and other equitable relief pursuant to Clayton Act Section 16, 15 U.S.C. §26; (b) treble damages pursuant to Clayton Act Section 4, 15 U.S.C. §15; and (c) other remedies as the Court may deem appropriate and the interests of justice may require.

COUNT THREE

(Monopolization of the Smartphone Market in the United States in Violation of the Sherman Act, 15 U.S.C. §2)

- 297. Plaintiffs, on behalf of themselves and the Nationwide Class that they represent, incorporate the allegations of paragraphs 1 through 278 above as if fully set forth herein.
- 298. Smartphones in the United States is a relevant antitrust market, and Apple has monopoly power in that market.
- 299. Apple has willfully monopolized the smartphone market in the United States through an exclusionary course of conduct and the anticompetitive acts described herein. Each of Apple's actions individually and collectively increased, maintained, or protected its smartphone monopoly. Apple's anticompetitive acts include, but are not limited to, its contractual restrictions against app creation, distribution, and access to APIs that have impeded apps and technologies including, but not limited to, super apps, cloud streaming, messaging, wearables, and digital wallets. The areas identified in this complaint reflect a non-exhaustive list of recent

anticompetitive acts but as technology advances, both the technologies impeded, and the specific manner of impediment may shift in response to technological and regulatory change consistent with Apple's past conduct.

- 300. While each of Apple's acts is anticompetitive in its own right, Apple's interrelated and interdependent actions have had a cumulative and self-reinforcing effect that has harmed competition and the competitive process.
- 301. Apple's anticompetitive acts have had harmful effects on competition and consumers.
- 302. Apple's exclusionary conduct lacks a procompetitive justification that offsets the harm caused by Apple's anticompetitive and unlawful conduct.
- 303. Plaintiffs and members of the Nationwide Class have suffered injury flowing from the anticompetitive effects of Apple's conduct, including measurable damages in an amount to be calculated at trial, and they face an ongoing threat of new injuries absent an injunction restraining Apple's monopolization of the smartphone market.
- 304. Plaintiffs seek all remedies available under the Clayton Act, including, without limitation, the following: (a) injunctive and other equitable relief pursuant to Clayton Act Section 16, 15 U.S.C. §26; (b) treble damages pursuant to Clayton Act Section 4, 15 U.S.C. §15; and (c) other remedies as the Court may deem appropriate and the interests of justice may require.

COUNT FOUR

(Attempted Monopolization of the Smartphone Market in the United States in Violation of the Sherman Act, 15 U.S.C. §2)

- 305. Plaintiffs, on behalf of themselves and the Nationwide Class that they represent, incorporate the allegations of paragraphs 1 through 278 above as if fully set forth herein.
- 306. Smartphones in the United States is a relevant antitrust market, and Apple has attempted to monopolize that market.
- 307. Apple has attempted to monopolize the smartphone market in the United States through an exclusionary course of conduct and the anticompetitive acts described herein. Each of Apple's actions individually and collectively increased Apple's market power in the smartphone market.
- 308. Apple's anticompetitive acts include, but are not limited to, its contractual restrictions against app creation, distribution, and access to APIs that have impeded apps and technologies including, but not limited to, super apps, cloud streaming, messaging, wearables, and digital wallets. The areas identified in this complaint reflect a non-exhaustive list of recent anticompetitive acts but as technology advances, both the technologies impeded, and the specific manner of impediment may shift in response to technological and regulatory change consistent with Apple's past conduct.

- 309. While each of Apple's acts is anticompetitive in its own right, Apple's interrelated and interdependent actions have had a cumulative and self-reinforcing effect that has harmed competition and the competitive process.
- 310. In undertaking this course of conduct, Apple has acted with specific intent to monopolize, and to destroy effective competition in, the smartphone market in the United States. There is a dangerous probability that, unless restrained, Apple will succeed in monopolizing the smartphone market in the United States, in violation of Section 2 of the Sherman Act.
- 311. Plaintiffs and members of the Nationwide Class have suffered injury flowing from the anticompetitive effects of Apple's conduct, including measurable damages in an amount to be calculated at trial, and they face an ongoing threat of new injuries absent an injunction restraining Apple's attempted monopolization of the smartphone market.
- 312. Plaintiffs seek all remedies available under the Clayton Act, including, without limitation, the following: (a) injunctive and other equitable relief pursuant to Clayton Act Section 16, 15 U.S.C. §26; (b) treble damages pursuant to Clayton Act Section 4, 15 U.S.C. §15; and (c) other remedies as the Court may deem appropriate and the interests of justice may require.

COUNT FIVE

(Violations of the Cartwright Act, Cal. Bus. & Prof. Code §16720, et seq.)

- 313. Plaintiffs, on behalf of themselves and the Nationwide Class that they represent, incorporate the allegations of paragraphs 1 through 278 above as if fully set forth herein.
- 314. Apple's actions as described above constituted an unreasonable restraint of trade or commerce throughout California and the rest of the United States in violation of the Cartwright Act, §16720, *et seq.* of the California Business and Professions Code.
- 315. The Nationwide Class has been injured in their business and property as a result of Apple's illegal conduct, for which they seek damages (treble damages where appropriate) including pre-judgment interest.

COUNT SIX

(Violations of the Arizona Uniform State Antitrust Act, Ariz. Rev. Stat. Ann. §44-1401, et seq.)

- 316. Plaintiff Morgan, on behalf of himself and the Arizona Class that he represents incorporates the allegations of paragraphs 1 through 278 above as if fully set forth herein.
- 317. Arizona's Uniform State Antitrust Act provides that the establishment, maintenance or use of monopoly is unlawful. Ariz. Rev. Stat. Ann. §44-1403. "The establishment, maintenance or use of a monopoly or an attempt to establish a

monopoly of trade or commerce, any part of which is within this state, by any person for the purpose of excluding competition or controlling, fixing or maintaining prices is unlawful." *Id*.

- 318. Smartphones and performance smartphones in Arizona are the relevant antitrust markets, and Apple has monopoly power in those markets.
- 319. Apple has willfully monopolized the smartphone market and the performance smartphone market in Arizona through an exclusionary course of conduct and the anticompetitive acts described herein. Each of Apple's actions individually and collectively increased, maintained, or protected its smartphone and performance smartphone monopolies. Apple's anticompetitive acts include, but are not limited to, its contractual restrictions against app creation, distribution, and access to APIs that have impeded apps and technologies including, but not limited to, super apps, cloud streaming, messaging, wearables, and digital wallets. The areas identified in this complaint reflect a non-exhaustive list of recent anticompetitive acts but as technology advances, both the technologies impeded, and the specific manner of impediment may shift in response to technological and regulatory change consistent with Apple's past conduct.
- 320. While each of Apple's acts is anticompetitive in its own right, Apple's interrelated and interdependent actions have had a cumulative and self-reinforcing effect that has harmed competition and the competitive process.

- 321. Apple's anticompetitive acts have had harmful effects on competition and consumers.
- 322. Apple's exclusionary conduct lacks a procompetitive justification that offsets the harm caused by Apple's anticompetitive and unlawful conduct.
- 323. Plaintiff Morgan and members of the Arizona Class have suffered injury flowing from the anticompetitive effects of Apple's conduct, including measurable damages in an amount to be calculated at trial, and they face an ongoing threat of new injuries absent an injunction restraining Apple's monopolization of the smartphone and performance smartphone markets.
- 324. Plaintiff Morgan and the Arizona Class seek all remedies available under the Arizona Uniform State Antitrust Act, including, without limitation, injunctive and other equitable relief and treble damage, Ariz. Rev. Stat. Ann. §44-1408(B), and such other remedies as the Court may deem appropriate and the interests of justice may require.
- 325. Plaintiff Morgan has complied with Ariz. Rev. Stat. Ann. §44-1415(A) requiring a copy of the complaint to be served on the Attorney General simultaneously with the filing of this complaint. The proof of service shall be filed with the court.

COUNT SEVEN

(Violations of the Cartwright Act, Cal. Bus. & Prof. Code §16720, et seq.)

- 326. Plaintiff Mason, on behalf of himself and the California Class that he represents, incorporates the allegations of paragraphs 1 through 2780 above as if fully set forth herein.
- 327. Apple's actions as described above constituted an unreasonable restraint of trade or commerce throughout California and the rest of the United States in violation of the Cartwright Act, §16720, *et seq.* of the California Business and Professions Code.
- 328. The California Class has been injured in their business and property as a result of Apple's illegal conduct, for which they seek damages (treble damages where appropriate) including pre-judgment interest.

COUNT EIGHT

(Violations of the California Unfair Competition Law, Cal. Bus. & Prof. Code §17200, et seq.)

- 329. Plaintiff Mason, on behalf of himself and the California Class that he represents, incorporates the allegations of paragraphs 1 through 280 above as if fully set forth herein.
- 330. The California Unfair Competition Law ("UCL"), Cal. Bus. & Prof. Code §17200, et seq., prohibits any "unlawful," "fraudulent," or "unfair" business act or practice and any false or misleading advertising. In pertinent part, the UCL

provides that "unfair competition shall mean and include unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue or misleading advertising."

- Unlawful Business Practices: In the course of conducting business, Apple committed "unlawful" business practices in violation of the UCL by, *inter* alia, violating other laws, including, but not limited to, Section 2 of the Sherman Act; the Cartwright Act; Cal. Bus. & Prof. Code §16720, et seq.; Arizona Uniform Antitrust Act, Ariz. Rev. Stat. Ann. §44-1401, et seq.; Connecticut's Antitrust Act, Conn. Gen. State. Ann. §35-26, et seg.; Connecticut's Unfair Trade Practices Act, Conn. Gen. State. Ann. §42-110a, et seq.; Maine's Antitrust Law, Me. Rev. Stat. Ann. tit. 10, §1102, et seq.; Michigan's Antitrust Law, M.C.L.A. §445.771, et seq.; the Nevada Unfair Trade Practice Act, Nev. Rev. Stat. Ann. §598A.010; the Donnelly Act, N.Y. Gen. Bus. Law §§340-347; N.Y. Gen. Bus. Law §349; the New Jersey Antitrust Act, N.J.S.A. §56:9-1, et seq.; the Oregon Antitrust Law, Or. Rev. Stat. §646.010, et seq.; and the Wisconsin Antitrust Act, Wis. Stat. Ann. §133.01, et seq., as described herein.
- 332. Plaintiff reserves the right to allege other violations of law, which constitute other unlawful business acts or practices. Such conduct is ongoing and continues to date.

- 333. **Unfair Business Practices**: In the course of conducting business, Apple committed "unfair" business acts or practices by, *inter alia*, exercising its monopoly power in the smartphone and performance smartphone markets so as to charge consumers supracompetitive prices.
- 334. Under the "balancing test," the harm caused by Defendant's actions and omissions, as described in detail above, greatly outweigh any perceived utility.
- 335. Indeed, there is no benefit or utility to charging prices for Apple's products in in excess of what Apple could have charged in a competitive market solely for the reason that it because of its monopoly power.
- 336. Apple also engaged in immoral, unethical, oppressive, and unscrupulous activities that are substantially injurious to the public at large.
- 337. There were reasonably available alternatives to further Apple's legitimate business interests, other than the conduct described herein.
- 338. Plaintiff Mason and the California Class suffered injury in fact and lost money or property at the time of purchase as the result of Apple's unfair business practices in the form of excessive prices they paid for their Apple products but for the exercise of Apple's monopoly power in the smart phone and performance smart phone markets.
- 339. As alleged herein, Plaintiff Mason and the California Class have suffered injury in fact and lost money at the time of purchase as a result of Apple's

products because they paid higher prices than they would have in a competitive market.

340. Plaintiff Mason, on behalf of himself, the California Class, and the general public, seeks declaratory relief and an injunction prohibiting Apple Defendant from continuing such practices, restitution of all money obtained from Plaintiff Mason and the California Class that was collected as a result of unfair competition, and all other relief this Court deems appropriate, consistent with Cal. Bus. & Prof. Code §17203.

COUNT NINE

(Violations of Connecticut's Antitrust Act, Conn. Gen. Stat. Ann. §35-26, et seq.)

- 341. Plaintiffs Rabadi and Good, on behalf of themselves and the Connecticut Class that they represent, incorporate the allegations of paragraphs 1 through 280 above as if fully set forth herein.
- 342. Defendant's actions as alleged herein violate the Connecticut Antitrust Act, Conn. Gen. Stat. Ann. §35-26, *et seq.*, in that Apple has unreasonably restrained trade and commerce within the State of Connecticut and elsewhere.
- 343. Defendant's actions as alleged herein have damaged, directly and indirectly, the prosperity, welfare, and general economy of the State of Connecticut and the economic wellbeing of a substantial portion of the People of the State of Connecticut and its citizens and businesses at large. Plaintiffs Rabadi and Good seek

recovery of such damages on behalf of themselves and the Connecticut Class.

344. Plaintiffs Rabadi and Good also seek injunctive relief pursuant to Conn. Gen. Stat. Ann. §35-34, treble damages, and an award of attorneys' fees and costs pursuant to Conn. Gen. Stat. Ann. §35-35, and such other and further relief as this Court deems just and equitable, including disgorgement of all revenues, profits and gains achieved in whole or in part through the unlawful conduct alleged herein.

COUNT TEN

(Violations of Connecticut's Unfair Trade Practices Act, Conn. Gen. Stat. Ann. §42-110a, et seq.)

- 345. Plaintiffs Rabadi and Good, on behalf of themselves and the Connecticut Class that they represent, incorporate the allegations of paragraphs 1 through 280 above as if fully set forth herein.
- 346. Apple is a business enterprise engaged in trade or commerce in Connecticut, including but not limited to marketing and selling its smartphone products described herein.
- 347. Defendant's conduct as described herein is and has been unethical, immoral deceptive and unscrupulous and includes but is not limited to promoting and selling its smartphone products as superior to other products in the marketplace with respect to quality and functionality when, in fact, Apple's monopolistic practices inhibit the functionality of Apple's products by limiting the apps available to purchasers of Apple products and by limiting the interactivity of Apple products

to only other Apple products.

- 348. Apple's conduct constitutes unfair and deceptive acts and practices in the conduct of trade or commerce in violation of the Connecticut Unfair Trade Practices Act, Conn. Gen. Stat. Ann. §42-110a, et seq.
- 349. Plaintiffs Rabadi, Good, and members of the Connecticut Class have been damaged and have suffered an ascertainable loss of money and/or property.
- 350. Pursuant to Conn. Gen. Stat. Ann. §42-110g, Plaintiffs Rabadi, Good, and Class members seek damages, actual and punitive; equitable relief, including restitution of all monies paid to Apple as a result of Apple's unfair and deceptive acts and practices; injunctive relief enjoining Apple from its unfair and deceptive acts and practices; declaratory relief; attorneys' fees and any other relief the Court deems proper.

<u>COUNT ELEVEN</u> (Violations of Maine's Antitrust Law, Me. Rev. Stat. Ann. tit. 10, §1102, et seq.)

- 351. Plaintiff Balogh, on behalf of herself and the Maine Class that she represents, incorporates the allegations of paragraphs 1 through 280 above as if fully set forth herein.
- 352. As detailed herein, Apple wrongfully attempted to, acquired and unlawfully maintained monopoly power in the U.S. markets alleged herein.

- 353. As a direct and proximate cause of Defendant's conduct, Plaintiff Balogh and members of the Maine Class suffered harm in the form of overcharges.
- 354. Plaintiff Balogh and Maine Class members are entitled to damages, including multiple damages, suffered as a result of Defendant's unlawful conduct, as well as equitable relief as appropriate to cure Defendant's unlawful conduct and restore competition.

COUNT TWELVE (Violations of Michigan's Antitrust Law, M.C.L.A. §445.771, et seq.)

- 355. Plaintiff Collins, on behalf of herself and the Michigan Class that she represents, incorporates the allegations of paragraphs 1 through 280 above as if fully set forth herein.
- 356. As detailed herein, Apple wrongfully attempted to, established and unlawfully maintained and used monopoly power in the U.S. markets alleged herein.
 - 357. Apple's violations of Michigan's antitrust laws has been flagrant.
- 358. As a direct and proximate cause of Defendant's conduct, Plaintiff Collins and members of the Michigan Class have been injured in the form of overcharges.
- 359. Plaintiff Collins and Michigan Class members are entitled to damages, including multiple damages, suffered as a result of Defendant's unlawful conduct,

as well as equitable relief as appropriate to cure Defendant's unlawful conduct and restore competition.

COUNT THIRTEEN

(Violations of the Nevada Unfair Trade Practice Act Nev. Rev. Stat. Ann. §598A.010, et seq.)

- 360. Plaintiff Webb, on behalf of himself and the Nevada Class that he represents, incorporates the allegations of paragraphs 1 through 280 above as if fully set forth herein.
 - 361. The purpose of the Nevada Unfair Trade Practice Act is to:
 - (a) Prohibit acts in restraint of trade or commerce, except where properly regulated as provided by law.
 - (b) Preserve and protect the free, open and competitive nature of our market system.
 - (c) Penalize all persons engaged in such anticompetitive practices to the full extent allowed by law, in accordance with the penalties provided herein.

Nev. Rev. Stat. Ann. §598A.030(2).

- 362. Among the acts prohibited by the Nevada Unfair Trade Practices Act is "Monopolization of trade or commerce" in Nevada, "including, without limitation, attempting to monopolize or otherwise combining or conspiring to monopolize trade or commerce. . . ." Nev. Rev. Stat. Ann. §598A.060(1)(e).
- 363. Smartphones and performance smartphones in Nevada are the relevant antitrust markets, and Apple has monopoly power in those market.

- 364. Apple has willfully monopolized the smartphone market and the performance smartphone market in Nevada through an exclusionary course of conduct and the anticompetitive acts described herein. Each of Apple's actions individually and collectively increased, maintained, or protected its smartphone and performance smartphone monopolies. Apple's anticompetitive acts include, but are not limited to, its contractual restrictions against app creation, distribution, and access to APIs that have impeded apps and technologies including, but not limited to, super apps, cloud streaming, messaging, wearables, and digital wallets. The areas identified in this complaint reflect a non-exhaustive list of recent anticompetitive acts but as technology advances, both the technologies impeded, and the specific manner of impediment may shift in response to technological and regulatory change consistent with Apple's past conduct.
- 365. While each of Apple's acts is anticompetitive in its own right, Apple's interrelated and interdependent actions have had a cumulative and self-reinforcing effect that has harmed competition and the competitive process.
- 366. Apple's anticompetitive acts have had harmful effects on competition and consumers.
- 367. Apple's exclusionary conduct lacks a procompetitive justification that offsets the harm caused by Apple's anticompetitive and unlawful conduct.

- 368. Plaintiff Webb and members of the Nevada Class have suffered injury flowing from the anticompetitive effects of Apple's conduct, including measurable damages in an amount to be calculated at trial, and they face an ongoing threat of new injuries absent an injunction restraining Apple's monopolization of the smartphone and performance smartphone markets.
- 369. Plaintiff Webb and the Nevada Class seek all remedies available under the Nevada Unfair Trade Practices Act, including, without limitation, injunctive and other equitable relief and treble damages Nev. Rev. Stat. Ann. §598A.210, and such other remedies as the Court may deem appropriate and the interests of justice may require.
- 370. Plaintiff has complied with Nev. Rev. Stat. Ann. §598A.210(3) requiring a copy of the complaint to be mailed to the Attorney General simultaneously with the filing of this complaint.

COUNT FOURTEEN(Violation of the New Jersey Antitrust Act, N.J.S.A. §56:9-1, et seq.)

- 371. Plaintiff Bauman, on behalf of himself and the New Jersey Class, incorporates the allegations of paragraphs 1 through 280 above as if fully set forth herein.
- 372. The New Jersey Antitrust Act, N.J.S.A. 56:9-4(a), states: "It shall be unlawful for any person to monopolize, or attempt to monopolize, or to combine or conspire with any person or persons, to monopolize trade or commerce in any

relevant market within this State."

- 373. In the operation of its business, Apple engaged in numerous commercial practices that violate the New Jersey Antitrust Act, N.J.S.A. 56:9-1 to -19, including monopolizing or attempting to monopolize trade or commerce in the smartphone market and the performance smartphone market within the State of New Jersey, in violation of N.J.S.A. 56:9-4.
- 374. Each violation of the New Jersey Antitrust Act by Apple constitutes a separate unlawful practice and violation, under N.J.S.A. 56:9-16.
- 375. Plaintiff Bauman purchased an iPhone within the state of New Jersey during the relevant time period.
- 376. Plaintiff and members of the New Jersey Class have suffered injury flowing from the anticompetitive effects of Apple's conduct, including measurable damages in an amount to be calculated at trial, and they face an ongoing threat of new injuries absent an injunction restraining Apple's unlawful conduct in the relevant markets.
- 377. Plaintiff seeks all remedies available under the New Jersey Antitrust Act, N.J.S.A. 56:9-1 to -19, including, without limitation, the following: (a) injunctive and other equitable relief, pursuant to N.J.S.A. 56:9-10(b); (b) treble damages under N.J.S.A. 56:9-12(a); and (c) other remedies as the Court may deem appropriate and the interests of justice may require.

COUNT FIFTEEN

(Violations of the Donnelly Act, N.Y. Gen. Bus. Law §§340-347)

- 378. Plaintiffs Kouyate and Styron, on behalf of themselves and the New York Class that they represent, incorporate the allegations of paragraphs 1 through 280 above as if fully set forth herein.
- 379. Section 340 of Article 22 of the New York General Business Law prohibits monopolies and contracts or agreements in restraint of trade, with the policy of encouraging competition or the free exercise of any activity in the conduct of any business, trade, or commerce within the state of New York.
- 380. Plaintiffs Kouyate and Styron purchased Apple iPhones within the state of New York during the relevant period.
- 381. Apple's actions set forth herein occurred in the conduct of trade or commerce under the Donnelly Act.
- 382. As alleged in more detail herein, while Apple promotes and sells its smartphone products as superior to other products in the marketplace with respect to quality and functionality when, in fact, Apple's monopolistic practices inhibit the functionality of Apple's products by limiting the apps available to purchasers of Apple products and by limiting the interactivity of Apple products to only other Apple products.
- 383. Apple violated the Donnelly Act by, at a minimum: (a) representing Apple smartphone products have characteristics, uses, benefits, and qualities which

they do not have; (b) concealing that fact that Apple smartphone products are interoperable only with other Apple products; and (c) concealing the fact that Apple smartphone products may only use apps selected and approved by Apple.

- 384. Apple knew or should have known that its conduct violated the Donnelly Act.
- 385. As a direct and proximate result of Apple's violations of the Donnelly Act, Plaintiffs Kouyate, Styron, and the New York Class members have suffered injury-in-fact and/or actual damages.
- 386. Plaintiffs Kouyate, Styron, and the New York Class members have been damaged in an amount to be proven at trial, and seek all just and proper remedies, including, but not limited to, actual damages, treble damages, declaratory relief, injunctive relief, reasonable costs (in an amount not exceeding \$10,000) and attorneys' fees, as well as pre- and post-judgment interest and such other and further relief provided by law and equity.

COUNT SIXTEEN

(Violations of the New York Consumer Protection from Deceptive Acts and Practices, N.Y. Gen. Bus. Law §349, et seq.)

387. Plaintiffs Kouyate and Styron, on behalf of themselves and the New York Class that they represent, incorporate the allegations of paragraphs 1 through 280 above as if fully set forth herein.

- 388. Plaintiffs Kouyate, Styron, and the New York Class members are "persons" under N.Y. Gen. Bus. Law 349(h), the New York Consumer Protection from Deceptive Acts and Practices ("NY GBL").
- 389. Apple's actions set forth herein occurred in the conduct of trade or commerce under the NY GBL.
- 390. The NY GBL makes unlawful "[d]eceptive acts or practices in the conduct of any business, trade or commerce. . . ." N.Y. Gen. Bus. Law §349.
- 391. Apple's conduct, as set forth herein, constitutes deceptive acts or practices under this section.
- 392. As alleged in more detail herein, while Apple promotes and sells its smartphone products as superior to other products in the marketplace with respect to quality and functionality when, in fact, Apple's monopolistic practices inhibit the functionality of Apple's products by limiting the apps available to purchasers of Apple products and by limiting the interactivity of Apple products to only other Apple products.
- 393. Apple violated the NY GBL by, at a minimum: (a) representing Apple smartphone products have characteristics, uses, benefits, and qualities which they do not have; (b) concealing that fact that Apple smartphone products are interoperable only with other Apple products; and (c) concealing the fact that Apple smartphone products may only use apps selected and approved by Apple.

- 394. Apple knew or should have known that its conduct violated the NY GBL.
- 395. Apple owed Plaintiffs Kouyate, Styron, and the New York Class members a duty to disclose the true nature of its smartphone products, because Apple:
- (a) possessed exclusive knowledge that it was were manufacturing, selling, and distributing products in New York that did not perform as advertised in order to protect Apple's monopoly in the smartphone and performance smartphone markets; and
- (b) intentionally concealed the foregoing from Plaintiff Kouyate and the New York Class members; and/or
- (c) made incomplete representations about the quality and performance of Apple's smartphone products, while purposefully withholding material facts from Plaintiff Kouyate and the New York Class members that contradicted these representations.
- 396. Apple's false and misleading statements about its smartphone products were material to Plaintiffs Kouyate, Styron, and to the New York Class members.
- 397. Apple's unfair or deceptive acts or practices were likely to, and did in fact, deceive reasonable consumers, including the New York Class members, about the quality and operability of its smartphone products.

- 398. Apple's violations present a continuing risk to the New York Class members, as well as to the general public.
- 399. Apple's unlawful acts and practices complained of herein affect the public interest.
- 400. Plaintiffs Kouyate, Styron, and the New York Class members suffered ascertainable loss and actual damages as a direct and proximate result of Apple's misrepresentations and its concealment of and failure to disclose material information.
- 401. Apple had an ongoing duty to all their customers to refrain from unfair and deceptive practices under the NY GBL.
- 402. All purchasers of Apple smartphone products suffered ascertainable loss as a result of Apple's deceptive and unfair acts and practices made in the course of Apple's business through loss of money or property at the time of purchase in form of the retail price paid for the smartphone products.
- 403. As a direct and proximate result of Apple's violations of the NY GBL, Plaintiffs Kouyate, Styron, and the New York Class members have suffered injury-in-fact and/or actual damages.
- 404. As a result of the foregoing willful, knowing, and wrongful conduct of Apple, Plaintiffs Kouyate, Styron, and the New York Class members have been damaged in an amount to be proven at trial, and seek all just and proper remedies,

including, but not limited to, actual damages or \$50 in statutory damages, whichever is greater, treble damages up to \$1,000, punitive damages to the extent available under the law, reasonable attorneys' fees and costs, an Order enjoining Apple's deceptive and unfair conduct, and all other just and appropriate relief available under the NY GBL.

405. Plaintiffs Kouyate and Styron, individually and on behalf of the New York Class, seek monetary damages, costs, attorneys' fees, and such other and further relief provided by law and equity.

<u>COUNT SEVENTEEN</u> (Violations of Oregon's Antitrust Law Or. Rev. Stat. §646.010, et seq.)

- 406. Plaintiff Stuck, on behalf of herself and the Oregon Class that she represents incorporates the allegations of paragraphs 1 through 280 above as if fully set forth herein.
- 407. Oregon's Antitrust Law provides: "Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of trade or commerce, shall be in violation of ORS 136.617, 646.705 to 646.805 and 646.990." Or. Rev. Stat. §646.730.
- 408. Smartphones and performance smartphones in Oregon are the relevant antitrust markets, and Apple has monopoly power in those markets.

- 409. Apple has willfully monopolized the smartphone market and the performance smartphone market in Oregon through an exclusionary course of conduct and the anticompetitive acts described herein. Each of Apple's actions individually and collectively increased, maintained, or protected its smartphone and performance smartphone monopolies. Apple's anticompetitive acts include, but are not limited to, its contractual restrictions against app creation, distribution, and access to APIs that have impeded apps and technologies including, but not limited to, super apps, cloud streaming, messaging, wearables, and digital wallets. The areas identified in this complaint reflect a non-exhaustive list of recent anticompetitive acts but as technology advances, both the technologies impeded, and the specific manner of impediment may shift in response to technological and regulatory change consistent with Apple's past conduct.
- 410. While each of Apple's acts is anticompetitive in its own right, Apple's interrelated and interdependent actions have had a cumulative and self-reinforcing effect that has harmed competition and the competitive process.
- 411. Apple's anticompetitive acts have had harmful effects on competition and consumers.
- 412. Apple's exclusionary conduct lacks a procompetitive justification that offsets the harm caused by Apple's anticompetitive and unlawful conduct.

- 413. Plaintiff Stuck and members of the Oregon Class have suffered injury flowing from the anticompetitive effects of Apple's conduct, including measurable damages in an amount to be calculated at trial, and they face an ongoing threat of new injuries absent an injunction restraining Apple's monopolization of the smartphone and performance smartphone markets.
- 414. Plaintiff Stuck and the Oregon Class seek all remedies available under the Oregon Antitrust Law including, without limitation, injunctive and other equitable relief and treble damages under Or. Rev. Stat. §646.780, and such other remedies as the Court may deem appropriate and the interests of justice may require.

COUNT EIGHTEEN

(Violations of the Wisconsin Antitrust Act, Wis. Stat. Ann. §133.01, et seq.)

- 415. Plaintiff Sutters, on behalf of herself and the Wisconsin Class that she represents, incorporates the allegations of paragraphs 1 through 280 above as if fully set forth herein.
- 416. Wisconsin law prohibits monopolies and attempts to monopolize. Wis. Stat. Ann. §133.03(2).
- 417. Plaintiff Sutters and the Wisconsin Class members have been damaged in an amount to be proven at trial, and seek all just and proper remedies, including, but not limited to actual damages, treble damages, and the cost of the suit, including reasonable attorneys' fees. *See* Wis. Stat. Ann. §133.18.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs demand judgment as follows:

- A. Adjudging that this litigation may be maintained as a class action under Fed. R. Civ. P. 23, appointing Plaintiffs the named representatives of the Classes in which they are members, and appointing their counsel to serve as Class Counsel;
- Adjudging and decreeing that Apple has acted unlawfully to В. monopolize, or, in the alternative, attempt to monopolize, the smartphone market in the United States in violation of Section 2 of the Sherman Act, 15 U.S.C. §2; the Cartwright Act, Cal. Bus. & Prof. Code §16720, et seg.; Arizona Uniform Antitrust Act, Ariz. Rev. Stat. Ann. §44-1401, et seq.; the California Unfair Competition Law, Cal. Bus. & Prof. Code §17200, et seq.; Connecticut's Antitrust Act, Conn. Gen. Stat. Ann. §35-26, et seq.; Connecticut's Unfair Trade Practices Act, Conn. Gen. Stat. Ann. §42-110a, et seq.; Maine's Antitrust Law, Me. Rev. Stat. Ann., tit. 10, §1102, et seq.; the Michigan Antitrust Law, M.C.L.A. §445.771, et seq.; the Nevada Unfair Trade Practice Act, Nev. Rev. Stat. Ann. §598A.010; the New Jersey Antitrust Act, N.J.S.A. §56:9-1, et seq.; the Donnelly Act, N.Y. Gen. Bus. Law §340-347; the NY GBL, N.Y. Gen. Bus. Law §349; the Oregon Antitrust Law, Or.

- Rev. Stat. §646.010, et seq; and the Wisconsin Antitrust Act, Wis. Stat. Ann. §133.01;
- Adjudging and decreeing that Apple has acted unlawfully to C. monopolize, or, in the alternative, attempt to monopolize, the performance smartphone market in the United States violation of Section 2 of the Sherman Act, 15 U.S.C. §2; the Cartwright Act, Cal. Bus. & Prof. Code §16720, et seq.; Arizona Uniform Antitrust Act, Ariz. Rev. Stat. Ann. §44-1401, et seq.; the California Unfair Competition Law, Cal. Bus. & Prof. Code §17200, et seq.; Connecticut's Antitrust Act, Conn. Gen. Stat. Ann. §35-26, et seq.; Connecticut's Unfair Trade Practices Act, Conn. Gen. Stat. Ann. §42-110a, et seq.; Maine's Antitrust Law, Me. Rev. Stat. Ann. tit. 10, §1102, et seg.; the Michigan Antitrust Law, M.C.L.A. §445.771, et seg.; the Nevada Unfair Trade Practice Act, Nev. Rev. Stat. Ann. §598A.010; the New Jersey Antitrust Act, N.J.S.A. §56:9-1, et seq.; the Donnelly Act, N.Y. Gen. Bus. Law §§340-347; the NY GBL, N.Y. Gen. Bus. Law §349; the Oregon Antitrust Law, Or. Rev. Stat. §646.010, et seq.; and the Wisconsin Antitrust Act, Wis. Stat. Ann. §133.01;
- D. Entering judgment for Plaintiffs and members of the Nationwide Class,
 Arizona Class, California Class, Nevada Class, New York Class,

Oregon Class, and Wisconsin Class against Defendant for treble damages sustained by Plaintiffs and the members of the Classes as allowed by law and for such equitable relief as the Court deems necessary to cure any anticompetitive harm, together with the costs of this action, including reasonable attorneys' fees, pursuant to Section 4 and 16 of the Clayton Act (15 U.S.C. §§15 and 26); Ariz. Rev. Stat. Ann. §44-1408(b); Cal. Bus. & Prof. Code §16720, et seq.; Cal. Bus. & Prof. Code §17203; Conn. Gen. Stat. Ann. §35-34; Conn. Gen. Stat. Ann. §42-110g; Me. Rev. Stat. Ann. tit. 10, §1102, et seq.; M.C.L.A. §445.771, et seq.; Nev. Rev. Stat. Ann. §598A.010; N.J.S.A. §56:9-1, et seq.; N.Y. Gen. Bus. Law §340; N.Y. Gen. Bus. Law §349; Or. Rev. Stat. §646.780;, and Wis. Stat. Ann. §133.18.

- E. Awarding Plaintiffs and the Classes pre-judgment and post-judgment interest at the highest legal rate from and after the date of service of this Complaint to the extent provided by law; and
- F. Enjoining Apple from continuing to engage in the anticompetitive practices described herein and from engaging in any other practices with same purpose or effect as the challenged practices, including but not limited to:

- 1. preventing Apple from using its control of app distribution to undermine cross-platform technologies such as super apps and cloud streaming apps, among others;
- 2. preventing Apple from using private APIs to undermine crossplatform technologies like messaging, smartwatches, and digital wallets, among others; and
- 3. preventing Apple from using the terms and conditions of its contracts with developers, accessory makers, consumers, or others to obtain, maintain, extend, or entrench a monopoly;
- G. Such other relief the Court finds just and proper.

XI. JURY TRIAL DEMANDED

418. Plaintiffs request a trial by jury on all matters so triable.

Respectfully submitted,

Dated: May 13, 2024.

/s/ Christopher A. Seeger

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